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THE LIFE OF PARACELSUS

PARACELSUS, AGED TWENTY-FOUR.

From the painting by Scorel, 1517, now in the Louvre Gallery.

[*Frontispiece*

THE LIFE OF PARACELSUS

THEOPHRASTUS VON HOHENHEIM

1493—1541

BY ANNA M. STODDART

EDITOR OF "THE LIFE OF ISABELLA BIRD (MRS. BISHOP)"

WITH ILLUSTRATIONS

LONDON
JOHN MURRAY, ALBEMARLE STREET, W.
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THIS BOOK IS DEDICATED

TO

MRS. GLASSFORD BELL

WITH AFFECTIONATE GRATITUDE FOR HER

INTEREST AND ENCOURAGEMENT

IN THE

PREPARATION OF IT

PREFACE

In 1833, at the age of twenty-one, Robert Browning wrote his "Paracelsus," a poem which has to this day held its own as perhaps the most penetrating of his sympathetic revelations. The poet himself characterised such a poem as the dramatic revelation of a soul, generally that of an imaginary person. For this cause many readers and admirers of "Paracelsus" have classed it with others which owed their emergence from subjective chaos to the poet's creative power. But other readers were vaguely aware that a man bearing this name, and held for an extravagant and pretentious charlatan, made some small stir in the sixteenth century, and was dismissed from serious consideration as a bibulous braggart, uneducated, quarrelsome, self-assertive, and disreputable. Browning knew more than his readers, for he possessed some of Hohenheim's own writings and a few biographical notes of his career mainly derived from the books of the man's inveterate foes and now known to be mendacious calumnies. The

astonishing fact is that through this paucity of evidence and this cloud of hostile obscuration the poet discerned his greatness.

About a quarter of a century ago, students at Leipzig, Berlin, Vienna, and Salzburg began to examine the neglected traces of Hohenheim's career and to estimate its importance to science. With that infinite patience, accuracy, and experienced judgment which distinguish German from nearly all other scholars, these men unravelled the tangled web of misrepresentation and rescued its golden thread of truth from the meshes. Dr. Sudhoff effected his masterly inquiry into the accumulated writings attributed to Paracelsus and published its results in the two volumes of his " Attempt at a Critical Estimate of the Authenticity of the Paracelsian Writings," the first of which appeared at Berlin in 1894.

Dr. Carl Aberle investigated the portraits of all kinds, plastic and graphic, oil-paintings, sketches, copper-plate engravings and woodcuts, and systematised them ; and in pursuance of this laborious quest made almost as many pilgrimages as Paracelsus had made and discovered from legendary and oral tradition a mass of subsidiary but important biographical data. He continued too the surgical examinations of Hohenheim's skull and bones which were begun in Salzburg by his father and published their testimony in his valuable book " Monu-

ment, Skull, and Portraiture of Theophrastus Paracelsus," at Salzburg, in 1891.

Dr. Julius Hartmann made a close study of those books which Dr. Sudhoff recognised as authentic wiritings of Hohenheim and collected from them in chronological order all references to his active life, his journeys and personal experiences, compiling what resembles an autobiography, which is a *sine quâ non* to all students of his effort to reform medical science.

Professors Franz Strunz at Leipzig and Carl Strunz at Vienna make the amazing genius of this persecuted man the subject of lectures to their students, and the former is editing an edition of his works in their original German with notes of explanation, and already both the "Paragranum" and the "Paramirum" have appeared.

These men are pioneers in Paracelsian research and their work is attracting many students.

To Browning's poem this "Life of Paracelsus" owes its inspiration; to those pioneers and to his own works it owes its authenticity. Attracted to the subject by the tentative but unsatisfactory work of the Browning Society, of whose committee I was a member for some years, I meditated twenty years ago the possibility of writing a popular Life, which while based on accurate research should as far as possible reconstruct the sequence of his circum-

NOTE

It is with deep regret that I have to announce the death of Miss Anna Stoddart within a few hours of the passing for press of the last sheets of this volume.

This is not the place in which to give a biographical account of her, but the notices which have appeared in the leading newspapers afford ample testimony to the high esteem in which she and her educational work were held by a large circle of friends and admirers.

For some years past her whole life and energies had been devoted to this work on Paracelsus. Her previous studies and her linguistic attainments specially fitted her for the task, and she spent many months in Germany and Italy in order to investigate on the spot the career of a very remarkable man who is known to the British public mainly through the works of Robert Browning.

I trust that the public will give a favourable reception to this scholarly and conscientious work for the sake both of the author and the subject of it.

JOHN MURRAY.

September 1, 1911.

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LIFE OF PARACELSUS

CHAPTER I

DR. WILHELM VON HOHENHEIM

When Einsiedeln
And its green hills were all the world to us.

THE valley of Einsiedeln stretches from the two Mythen mountains on the south to Etzel on the north. Up to the end of the eighth century this high valley was uninhabited. Its streams and brooks found their way through forests to the Lake of Zürich. These forests knew the wolf's howl and the vulture's scream, but the voice of man was unheard beyond their fringe, where a few hovels here and there might be found. The whole district was a wilderness and was feared by the dwellers near the lake. The great snow-mountains which pass through the valley of Glarus, through Schwyz, Uri, and Unterwalden, bounded it on the south; it pushed its way northwards to the meadows by the lake; it reached Altmatt on the west, and on the east it skirted the upper lake and the march.

This wilderness belonged to the Dukes of Alemannia, and was ecclesiastically within the

diocese of the Bishops of Constance; but although the nobles of Alemannia may have sometimes hunted on its outskirts, it was shunned generally as the Dark Forest and a region of sinister reputation.

Such it was before the time of Meinrad, who was born towards the end of the eighth century. His family belonged to a branch out of the stem from which sprang the ancestors of the Imperial House of Germany, and his father was a Count of Zollern. He lived near Rottenburg, in the valley of the Neckar, and there Meinrad, or Meginrat, spent his childhood. The boy was serious-minded, and his father saw in this quality a monition that he was suited for the Church rather than for the world. He took him to a famous monastic school upon the Island of Reichenau, probably influenced in his choice by the fact that a relation of his own, called Erlebald, was one of its instructors. Much country round the lakes of Zürich and Constance was already christianised, some of it by the devoted Irish missionaries Columban and Gallus, and the latter's memory is enshrined in the name of St. Gallen. For Ireland was a base of missionary enterprise in those days, and with the Cross it sent forth the light of education. Germany and France looked to Ireland for schooling, because its learning, its music, its arts of design and manufacture were in advance of the crude Anglian and Alemannic civilisations.

Still, part of Helvetia and Alemannia was heathen to all intents and purposes, and only the nobles sought learning for their sons in the monastic schools.

Count Zollern's wise insight was endorsed by the event. From the beginning Meinrad lent a willing ear to his instructors. He took to study with zeal, mastered Latin and theology, was diligent in the scriptorium, became expert in Church formula and ritual, and sought the grave exercises of the cloister rather than boyish sports and distractions. So gentle and willing a pupil endeared himself to the monks, and they encouraged his bias towards the priestly life. He spent his youth and early manhood at Reichenau and took deacon's and priest's orders when he was twenty-five years old. In 822, Erlebald was made abbot of the monastery, and shortly afterwards Meinrad entered the order of St. Benedict and submitted himself wholly to its rigorous Rule. His learning fitted him for scholarly rather than for physical labour, and he copied the whole of the Scriptures as well as several books of devotion. He taught in the school, and after some time was sent to Bollingen on the upper Lake of Zürich, where Reichenau had a dependent house and school, established to meet the Emperor Charlemagne's desire for a wider distribution of educational facilities in that neighbourhood.

Meinrad performed his duties obediently and

diligently, but his heart was in the devotional, not in the secular vocation of monasticism. Across the narrow lake he could see the wooded wilderness when after a night of prayer he watched the sun rise on its mountains. Their dark recesses drew him with irresistible magnetism. Yonder was solitude, and he yearned for solitude with God. Had not St. Benedict in his Rule enjoined "the battle of the soul in the desert, where only God is present, and other help there is none to maintain the soul's warfare against temptation"?

He could not walk by the lake's shore without experiencing an agony of longing as he gazed. At last he decided to cross the lake and explore the ground. Some of his pupils accompanied him, and they climbed till they reached the slopes of the High Etzel. Here the boys stopped to fish in the Sihl, but Meinrad pushed upwards into the forest, and found a spot on the lower slope fit for a hermitage. As teacher and pupils fared back to the southern shore, they came upon a little village, now called Altendorf, where a kindly woman promised to provide for his maintenance those things that were necessary to existence, and to carry them to a point on the forest's edge from which at stated times he could fetch them.

Meinrad returned to Bollingen with his boys and then sought Abbot Erlebald to lay before him his heart's desire. Erlebald talked the

whole matter out with him and became aware that solitude was God's will for him and must be obeyed. Meinrad received his permission and made his preparation for the change, giving to the monastery of Reichenau nearly all the copies which he transcribed there. He retained the Rule of St. Benedict, his Mass-book, and a few sacred writings. He left for the Etzel some time in 829, and there, just where now the chapel stands, he built a little hut and began the hermit life.

Unfortunately, the solitude he had sought was disturbed. There was a great mental restlessness in those difficult days of transition, and the spectacle of a man who knew his own mind and set himself to win a closer communion with God than even the monastery could afford appealed to many wistful men and women. They climbed the rough hill that led to his hermitage to seek counsel, comfort, and intercession. Others followed out of curiosity, and the object of his renunciation seemed to be thwarted. He bore the intrusion bravely for seven years. Doubtless in winter, when the High Etzel is mantled with snow, he could recover, but during the greater part of the year pilgrims flocked to seek his blessing. His hermitage was too near the world, and he decided to push further into the heart of the dark forest to escape its contact. About four miles he travelled towards the pyramidal

Mythens, which stand sentinel on the south, and there he found a plain thickly wooded but level and walled on the east by the prolonged semi-circular heights of the Freiherrenberg. He halted just below them, and with the help of some woodcutters he rebuilt his hermitage. In the neighbourhood the Alp rustled through the fir-trees, a streamlet whose pure water ministered to his daily needs.

Round the shores of Lake Zürich many religious houses had been established. Over one of these, a convent, the Abbess Hildegard, a king's daughter and a holy woman, presided. Moved to admiration and compassion for a renunciation which lacked even the objective aids to devotion, she sent Meinrad a Madonna and Child carved in wood, and it is supposed aided him to build a little sanctuary in which to place this treasure. Another abbess, Heilwiga of Schännis, gave him an altar, candlesticks, incense, and wax, perhaps too the priestly equipment for his daily services. "Our Lady of Einsiedeln" was installed, no more to leave the spot in which her honour dwells. For the Madonna and Child of the Holy Chapel in the monastery-church of Einsiedeln, at whose shrine more than a hundred thousand pilgrims yearly pray, kneeling while they listen to the *Salve Regina* sung every afternoon—the most touching intercessory laud surely ever heard, with its wail as of the wind amongst the fir-branches, its

cry for deliverance as of lonely souls in conflict —is the wooden statue sent thither by the Abbess Hildegard nearly eleven hundred years ago.

Here Meinrad had peace from the world, although now and again distressed souls sought his help, and from time to time one of the brothers from Reichenau would come to visit him. From the evil within and the powers of darkness he suffered fierce assault, but overcame in the might of the Cross, and we are told that God sent him visible messengers of consolation once in the form of Jesus, the little Jesus. His hour of recreation was passed in the forest, walking to and fro, and a pair of young ravens whom he fed from his hand with crumbs of his scanty meals attached themselves to him, as long centuries before two ravens had attached themselves to St. Benedict.

For hard work he had his axe, and he cleared a space round the chapel and cell. When this was done he began to clear the plain in front of them and so to reclaim the wilderness. For twenty-five years St. Meinrad dwelt in his hermitage—or *Einsiedelei*. In his later years pilgrims, many of them nobles, sought him out in their times of affliction and contrition, and the way to the Einsiedelei became a well-trodden path. He would receive their confessions, restore and console them, celebrate Mass for them and send them away renewed and resolved.

But the fame of these visits reached the ears of evil men, and they reasoned that in his solitude he must have much wealth accumulated, gifts of gold and silver vessels for his sanctuary, which could be converted into wealth. A German and a Rhaetian resolved to kill him. Father Odilo Ringholz tells the story of their crime. Meinrad, while celebrating his early Mass, was made aware of approaching death and of special divine preparation. He spent the whole day in prayer. At evening his murderers came. He received them with friendly greeting and shared his bread and water with them. When it grew dark, they fell upon him with clubs and beat him to death. But as he died they saw lighted tapers round his body and a perfume as of incense came from it. In terror they fled, not daring to enter the sanctuary. The ravens, who had watched their crime, rose from their perch screaming with rage and pursued them all the way to Zürich, so that they were unable to find refuge and were thrown into prison. Their brutal sacrilege was discovered and the Archduke Adalbert condemned them to be burnt to death.

When the news reached Reichenau, Abbot Walter and some of the monks went up to the hermitage and carried Meinrad's heart to his hut-chapel on the Etzel and his body to Reichenau, there to be buried with every sacred rite. This was in January 861.

So far we have lingered over the story of Einsiedeln, whose importance rose out of the memory of its saint and out of the pilgrimages which kept it alive. Now, we can only glance at the events of the six centuries which separate the death of St. Meinrad from the birth of Paracelsus, and at these as they affected the growth of Einsiedeln.

For nearly half a century there is nothing to record. The chapel and hermitage fell almost into ruins, for the occasional pilgrimages did not avail to keep them in repair. But early in the tenth century, a dignitary of Strassburg Cathedral came with some followers, drawn by the two-fold cord of St. Meinrad's memory and the longing for solitude. Benedict, better known as Benno, set to work to repair the building and to add cells to the hermitage, one for each, for they practised the hermit life, not that of an established order. When the building was done, they followed Meinrad's example and felled trees in front of and around their settlement. The wide meadow now called the Brüel is due to their toil, as is a large stretch of arable land west of the Alp and still called Bennau. But in 927, Benno, against his will, was made Bishop of Metz and had to leave his little flock in the Dark Forest. He found the city of Metz given over to wickedness and admonished its citizens from the pulpit. His reward was their hatred, and when King Henry,

who had appointed him, was absent, they hired two knaves to lie in wait for him and put out his eyes. The ruffians added blows to this crime, and Benno sought release from the Synod and went back to Einsiedeln. He was very gladly welcomed and cared for and lived eleven peaceful, devout years till his death in 940. Six years before he died there came to join him another Canon of Strassburg, like himself a man of noble birth and possessing a large fortune. He brought with him a number of followers, and Benno made him abbot.

This Eberhard proposed to devote his money to the building of a church and monastery on the site of St. Meinrad's hermitage, to reorganise the hermit into the monastic life and to adopt the Rule of St. Benedict. To all this Benno gladly consented, but it was not till after his death that the buildings were begun. Amongst Eberhard's relatives were the wealthy Duke Hermann of Suabia and his wife the Duchess Reginlinde. The Duke bestowed large sums on these buildings, and his name is coupled with that of Eberhard as founder of the Church at Einsiedeln. He gave the ground on which it was built as well as the neighbouring land as far as the Etzel to the monastery, and secured from Emperor Otto I. a decree granting to the monks liberty to elect their abbot without interference. This decree admitted the abbot to the rank of Prince-Abbot.

It was towards the end of 947 that the buildings were finished. The church stood round and over St. Meinrad's little chapel which was preserved in its original form with its altar and Madonna. Church and chapel were ready for consecration. They were within the diocese of Constance—to which Einsiedeln belonged till the beginning of the eighteenth century—and the Bishop of Constance was asked to perform the solemn rite. The Bishop of Augsburg was invited to be present and brought with him some relics of St. Maurice as a gift.

Bishop Conrad of Constance was a man of deeply devotional nature and habit and rose about midnight on the eve of the consecration to pray in the new church. As he entered, the most wonderful singing met his ear. Some of the Benedictine monks were in the church and with him they went to the door of the little chapel, from which the sound proceeded. Looking in with reverent astonishment, they found the chapel lighted up and a great choir of angels conducting its consecration with chant and prayer and ceremony according to the ritual of the Church. They listened till the celestial function was ended and then returned to the monastery with hearts uplifted and amazed. The Bishop felt that in the human ceremony of the following day the chapel had no share, for God had consecrated it.

When Eberhard and the assembled monks

were told, they were astonished and troubled, and feared that Conrad and their brothers had seen a mocking vision, or were carried away by a fantasy. They entreated the Bishop to begin and complete the ceremony as it had been arranged. He yielded very reluctantly and the consecration began at the chapel. Scarcely had the first words been spoken when a voice from above said three times in reverberating tones: "Stop, brother, the chapel is already consecrated by God."

Afterwards, when Bishop Conrad was in Rome, he related all that he had seen and heard to Pope Leo VIII. and received from him a Bull forbidding any attempt in future to reconsecrate the chapel.

This incident roused the whole neighbourhood, and pilgrimages began to a spot so honoured by Heaven. These have continued in increasing numbers during the nine centuries and a half which have elapsed. To-day there is no diminution in their number, no relapse in their devotions. In the thirteenth century, the monastery was permitted to use a seal and chose the Madonna and Child for its impression, while the abbot's shield includes the two faithful ravens of St. Meinhard flying at full speed as after his assassins.

The oldest picture of Einsiedeln belongs to about 1513, and shows the church and monastery against the wooded slope behind, closely beset

by small houses, and in the Brüel groups of boys playing near a little church apparently at snowballing, with a few grave and reverend seniors watching the sport. There was a school three centuries before this date, superintended by the Benedictines, and the schoolmaster at the beginning of the fourteenth century composed some lines in honour of the church, which freely translated run as follows :

Some minsters from relics of saints have renown,
Some from dignities kings have bestowed in their love,
But ours can glory in both, and for crown,
In her great consecration by choirs from above.
Holy Virgin ! God set apart here to thy praise
His temple that we might be saved at thy shrine :
Here pilgrims implore thee in love and amaze
Weak and strong receive from thee all favours divine.

Through good and evil days Maria Einsiedeln endured. Working people and tradespeople gathered to the little town, to provide for the needs of the multitudes who visited the Holy Chapel, and a secular life began which was in sympathetic subjection to the Benedictine authority. But before the end of the fifteenth century much trouble had befallen this energetic community. The Benedictines were missionaries, church-builders, founders of religious houses, promoters of education and of learning. Part of their revenues, whether from gifts or from their increasing territorial property, was expended on these important undertakings.

The first misfortune occurred in 1029, when

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"This house of God and church shall be a hospital of refuge for the Princes, Counts, landowners and their children, as it is written in the chronicles and has been in custom for a long time."

Four abbots of high rank succeeded each other during the fifteenth century, the last of these being Conrad of Hohenrechberg, who was elected in 1480. Already, in his time, the strict observance of this qualification was considerably discussed. It was said that the devotional character of the monastery suffered from its social influence and that its discipline was greatly relaxed. In common with most religious houses of that date, Einsiedeln laid itself open to criticism and censure.

The first breath of the reformation had roused serious thinking in Bohemia and England, and when the wind of the Spirit is set in motion it passes from land to land. We may surmise that the failure of the Christian Church to maintain its high purpose in the fourteenth and fifteenth centuries was the main cause of that revolution which men call the Reformation. Like science, the Church in those times had become a discordant echo of its past. Its spiritual life was failing, and the forces which gathered their impetus slowly and silently, in men touched by the Spirit, from the spectacle of a Church at odds with God, at odds with man, found a

volcanic vent in their action and a challenge on their tongues of fire.

Under the gentle Conrad of Hohenrechberg there was no attempt at Einsiedeln to meet or refute the charges. He was abbot from 1480 to 1526, when the premonitory tremblings had become upheaval.

There was need, shortly after his election, of a physician to take charge of the sick in the town and of the pilgrim-hospital. The choice devolved upon the abbot. He summoned Dr. Wilhelm Bombast von Hohenheim, of whom Archbishop Netzhammer in his admirable "Life of Paracelsus" says:

"Wilhelm von Hohenheim was no bath and barber doctor, but a celebrated physician, trained in the best schools, who had acquired at Tübingen his degree of Licentiate of Medicine, as a chronicle of Villach tells us."

The name indicates his rank, but for fuller information we have to thank the latest authorities on the parentage of Paracelsus, Dr. Sudhoff, Dr. Carl Aberle, Dr. Strunz, and Dr. Hartmann, who have made careful investigation into his status by birth. Were it not for the malignity of his son's enemies, contemporary and posthumous, it would be unnecessary to dwell at length on Wilhelm von Hohenheim's ancestry, but mendacious biographies of Paracelsus have been so long credited that it be-

comes a duty briefly to give the fruits of the latest research.

A soldier called Conrad Bombast von Hohenheim lived in 1270 and was known then as a feudal tenant of the Count of Wirtemberg. He died in 1299, leaving as his executor a Friedrich von Hohenheim. A close relation between the Counts of Wirtemberg and this family is evidenced by the lands and revenue which the Bombasts von Hohenheim could claim. This Conrad lived at Castle Hohenheim near Stuttgart and collected tithes from Plieningen and one-half of the revenue of Ober-Esslingen, and these rights lasted through the fourteenth and well into the fifteenth century. A family called Spät bought the feudal tenancy and rights from them in 1432 with Count Ulrich of Wirtemberg's permission. Wilhelm von Hohenheim married a lady of this family. He was a knight who in 1461 rode with Count Ulrich against the Count Palatine Friedrich and in 1492 shared the expedition to Landshut under Count Eberhard of Wirtemberg, accompanied by his brother George Bombast von Hohenheim. This happened just a year before the birth of Paracelsus, whose father had been already eleven years in Einsiedeln.

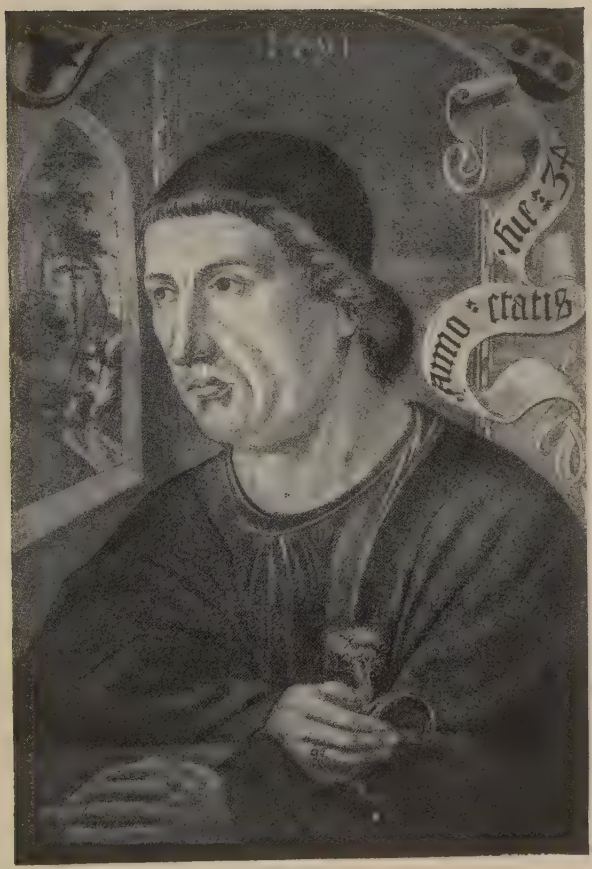
This George von Hohenheim had accompanied Count Eberhard on a pilgrimage to the Holy Land in 1468, and in his later life had entered the Order of the Knights of St. John, in which

he held high rank. He had a nephew Wilhelm Bombast von Hohenheim, whom we claim as the young doctor summoned from Suabia by Conrad von Hohenrechberg in 1481. The name Bombast, Bambast, Baumbast, or in its oldest form Banbast, was special to this branch of the von Hohenheims. Its fortunes were declining and his father, who lived at Riet, was neither a soldier nor wealthy. The son was educated for a profession in which he could make his own way.

After his arrival in Einsiedeln, he must have lived quietly and laboriously, studying too, both chemistry and botany, and making herbal medicine a special interest. He had many valuable manuscripts, copies perhaps made in Tübingen, and they comprised the chief thinking of his time in medicine, chemistry, astrology, and their cognate arts. When he was thirty-four years old, he married a lady of a family well known in Einsiedeln, Ochsner by name, whose father was probably the Rudi Ochsner who lived at the Sihl bridge. She held the position of matron of the pilgrim-hospital, under the abbot's administration, and the doctor must have come into frequent contact with her while attending invalid pilgrims professionally.

In honour of his marriage, which took place in 1491, Dr. Wilhelm von Hohenheim had his portrait taken. It is now in Salzburg in the Museum Carolina Augusteum, and illuminates

for us many matters which might otherwise have remained doubtful. His age is stated on a scroll to his left, just under the von Hohenheim shield, which bears three blue balls on a white band. On his right, in the left corner of the picture, is the head of an ox, not heraldically displayed, but probably connected with the family name of his bride. In his right hand he holds a carnation, the customary sign of a bridegroom. A small arched window on his right looks upon a road bordered by rocks and fir-trees, down whose slope a man on horseback and a pedestrian are wending, and this may be intended for the pilgrim-way to the High Etzel. The portraiture is most interesting and is well painted in oil upon a wooden panel. It shows a man of thirty-four years old, dressed in professional black and wearing a beret which covers the upper part of the head, all but a ring of thick and curling hair high on his brow and rather low on his neck. The face is finely featured, full of thought, gentle, kindly, deeply lined round the mouth, with delicately arched eyebrows and eyes in which wisdom, humour, and some sadness dwell. He wears two rings, one on the third finger of either hand. We gather that in 1491 Wilhelm von Hohenheim was a student, a man of kindliest temper, a gentleman who had the right to bear the arms of his family and to transmit them to his son, who always used them.



DR. WILHELM VON HOHENHEIM, FATHER OF PARACELSUS.

Painted in 1491, now in the Museum Carolina-Augusteum, Salzburg.

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Dr. Carl Aberle suggests some of the picture's probable vicissitudes before it was placed in the museum at Salzburg. It is said to have been seen in 1760 in the house of a merchant of that city, and its owner spoke of it as having hung in Paracelsus's sitting-room, when he lived there; a century later, it was in the possession of Herr Josef Mössl, who died in 1885, and who inherited it from his father, by whom it had been bought from a man called Schamhuber in the service of the Archbishop of Salzburg late in the eighteenth century.

The Ochsner family lived in a house on the further side of the bridge over the Sihl and close to the ascent to the Etzel. The original house was burnt down about 1838, and the building which took its place is not altogether a reproduction. In a map of old Einsiedeln and its neighbourhood, bridge and house are given as they were when Dr. von Hohenheim brought his wife to her father's home. There were two good stories in the long building, and the upper of these was assigned to the young couple. We hear little more of the doctor's wife. She was doubtless a quiet, devout, capable woman, who kept to her home duties after marriage.

The home was beautifully placed. It was approached from Einsiedeln by a hilly road which reached the Sihl bridge down a steep descent. The river rushed through a gorge, its banks clad with fir-trees and rich in plants and

wild flowers. The house stood a little back from the end of the covered bridge, its windows looking towards the pilgrim-way up the Etzel. Behind it stretched meadows where cattle grazed. The bridge, known as the Teufels-brücke, was rebuilt a century and a half ago, but as nearly as possible in its original form, so that one can realise to-day most of the features familiar to the inmates of the Ochsner house.

CHAPTER II

BIRTH, CHILDHOOD, EDUCATION

> The Ages
> Coming and going all the while—till dawned
> His true time's advent.

HERE, on November 10, 1493, their boy was born. He was christened Theophrastus in honour of a Greek thinker and follower of Aristotle, Theophrastus Tyrtamos of Eresus, physician, botanist, and mineralogist, whom his father specially admired. "Philip" *may* have been prefixed to this name, but it was not used by Paracelsus himself at all, and for "Aureole," it seems to have been conferred on him by his admirers in later life, and in 1538 he used it in the title of a document. Aureolus was a name of honour given to Theophrastus Tyrtamos and may have been playfully used by the doctor to his son. There was perhaps some faint luminous effluence from his face, as there has been from other men of genius, which won him this pet name. In looking at the portrait, wrongly ascribed to Tintoretto, drawn when Paracelsus was twenty-eight years old, there is an apparent attempt to indicate such a light

about his head. But it was not till after his death that the name was freely used by his biographers and publishers. His full name, set down without hypothetic additions, was Theophrastus Bombast von Hohenheim.

He was a difficult child to rear. Small, fragile, with a tendency to rickets, he required constant attention. This he received from his father, who watched him with anxious tenderness. Dr. von Hohenheim had discovered for himself the healing and strengthening value of open air, and when he was old enough Theophrastus was his constant companion and learned from him the names and uses of herbs for healing —for lotions, for potions, for poisons, for antidotes. This was his first reading of a page of God's book of nature. No fuller or more attractive page could be read than in the country round his own home. Father Martin Gander has catalogued the flora of Einsiedeln, of mountains, forest, meadow, lake, swamp, and roadside, and in his little book, published by Messrs. Benziger, we can discover what the little boy discovered in his earliest perusal of it.

Pharmacy had not reached a registered and acknowledged status in Europe, as it had done in China, Egypt, Judea, and Greece more than a thousand years before the Christian era. Indeed, the first European pharmacopœia belonged to Nüremberg in 1542, the year after Paracelsus died. But most of the herbal medicines known

to us now were known in the middle ages, and the religious houses cultivated them in their gardens and so kept up their use. But they were often administered inaccurately, and patients were forced to swallow mixtures which added to their suffering and sometimes hastened their end. The decoctions from herbs, however, were less repulsive than the mineral and animal brews given with prayers and holy water and a devout abstinence from fresh air.

On the meadows, banks, and in the woods, by the Sihl streams and in the Sihl valley, where swamps abound, spring, summer, autumn, and winter bring countless plants to bloom and fruition. In the meadows, primulas, gentians, daisies, salvia, ranunculus, orchises, camomile, colchicum, borage, angelica, fennel, kümmel, poppies, and martagon lilies succeed each other. In the woods, pirolas of five varieties, woodroof, belladonna, datura, violets, and wild berries are plentiful. On the banks and roadsides are campanulas, foxgloves, chicory, centaurea, many different veronicas, geums, mint, thyme, vervain, smilax, lychnis, St. John's wort, potentillas, ribes, and witch-herb. On the swamps are the mealy primrose in great patches of lavender and purple, sundews, myosotis, pinguiculas, mallows, equisetums, selaginella, a rare orchis relic of an older world; and on the moors and mountain slopes erica, azalia, alpenrose, saxifrage, grass of Parnassus,

dianthus, wild plum and wild berries abound. These are but a few of the plants in Father Gander's list, which includes a large number of other medicinal herbs and some to which magical powers were ascribed.

Theophrastus must have learnt them all by his father's side, when the doctor made his professional rounds on foot. They were long rounds, sometimes leading him over the Etzel to the villages on the shores of Lake Zürich, sometimes taking him southward to Einsiedeln and its outlying farms, on other days needing briefer trudging to the hamlets and farms within a mile or two of the Sihl bridge. When early summer brought the pilgrims, his attendance would be divided between the Etzel and Einsiedeln.

It has been suggested that his home served as a refreshment house for the pilgrims as they came down from the chapel and that a wheel was hung up on pilgrimage days to indicate that wine could be bought there. This rests on an assumption due to the presence of a wheel lying by the roadside in the landscape of his portrait, but it is nowhere confirmed. What is quite possible is that over-tired and delicate pilgrims found rest and care there and perhaps restoring draughts of wine.

These days would lead to many questions from the child and many answers from his father. A sad surmise haunts one, as one seeks to re-

construct his childhood, that the mother was no longer there, but had passed away while he was still young. He was so entirely in his father's care, and he suffered much from lack of suitable nourishment. But that he was brought up in a religious home is proved by his strong conviction of the profound importance of religion in after-years. For Paracelsus there were only two subjects of paramount interest in life: God in Heaven to be worshipped and trusted, God in nature and in man to be passionately sought after. As a child he would accept all that he was taught, in youth and manhood he thought for himself, but never once lost sight of the great eternal truths. To him, as we shall see, Jesus Christ was the divine teacher and example, whose *dicta* required positive obedience, not casuistic interpretation to vanishing point. We may accept from his own later reminiscences that his father was his first instructor in Latin, botany, alchemy, herbal medicine, surgery, and religious history. But there were influences at work for which Dr. von Hohenheim was not responsible. These were due to the spirit of his time and were not only born within him, but were rapidly both mentally and ethically developed.

Young as he was, he must have known the great events in Switzerland, which had nationalised so many of its cantons in the fourteenth century, and in the fifteenth had defended

the confederacy against Charles of Burgundy and Austria. In the very year which brought his father to Einsiedeln, the Convention of Stanz had taken place, which not only included new cantons but endorsed the older constitutional decrees and was the basis of the Swiss Confederation for three hundred years. The sentiment of individual canton self-government combined with a united executive found expression in those centuries, and of that rapid development in liberty and law Theophrastus must have heard, for Schwyz had always taken a prominent part in the wars, foreign and internal, of Switzerland.

And outside Switzerland events were taking place which were soon to draw this Confederacy into the whirlpool of their results, on whose verge most of Europe found itself.

Dr. Franz Strunz in the able and eloquent introduction to his "Life and Personality of Paracelsus" calls our attention to them. A new era was in birth, its predecessor in travail but bringing forth a great generation of men and of achievements; printing discovered: the arts turning to nature: science reconsidering its formulas and its assertions: theology called to account for its systems and its limitations: a new freedom opening its vistas to men's minds: the giant Antæus awaking from slumber on his mother earth to renew his struggle with ignorance, superstition, and prejudice.

In the infancy of the new age Paracelsus was an infant.

"The History of the Renascence," says Dr. Strunz, "philosophic as well as artistic, with its thousand inspirations, its thousand voices, must have reached Paracelsus, and we must endeavour to trace how this wonderful manifestation of his time affected the lonely investigator of nature and medicine—lonely amidst the erring crowds who followed the philosophic methods of the middle ages—how to him it may have seemed that old things were doomed to pass away and all things to become new. . . . The Renascence concealed a deeply rooted spiritual condition, an immense inner cleavage between the dying age and its bondsmen's creed and the world given over to the devil; between the absence of law and lawlessness. It was from the spirit of the Renascence that Paracelsus received his impulse towards the light of nature, towards scientific induction and comparison. Its alliance with the spiritual forces of the Reformation in both the narrower and wider sense of the word along with its influence upon men's souls—an influence not directly due to Luther—explains to us the other side of his character."

These influences were in active diffusion before Luther on the one side and Paracelsus on the other had given them voice. Two hundred and fifty years earlier another lonely soul had received vision, which pierced through

the accumulated darkness of fifteen centuries and discovered the key that could unlock God's treasure-house of nature, but men cried shame upon the sacrilege, and Roger Bacon's plea for experimental research was stifled and his writings were shunned and forgotten. His "Opus Majus" was not rescued from its tattered manuscript until a year after the death of Paracelsus, so unready was the Western world to accept a solution of the great enigmas till it was shaken loose from mental bondage by the Renascence and the Reformation.

The time was now eager to bring to new birth. In 1483 Luther, in 1493 Paracelsus was born: Pico della Mirandola died a year afterwards: in 1510 Girolamo Cardano, in 1517 Ambroise Paré was born: Copernicus was their contemporary. It was all one birth, new religious expression, new thought, new science, new art. And these were only amongst the many voices of that great human restlessness which desired what it could not formulate until they came.

It is impossible now to estimate how far the child came into contact with Benedictine influence. Apparently there is only one mocking allusion to him in the monastic archives of Einsiedeln, written after his death when he could make no reprisal. He was only nine years old when he left, but sufficiently old to be well acquainted with the church and its services.

It was burnt down in 1465, in 1509, and again in 1577. We do not know its form between 1493 and 1502; but there is an old picture of Einsiedeln in 1577, which preserves for us its appearance then before its last destruction by fire. The rebuilding was long delayed for lack of funds, so that the present church was erected late in the seventeenth century, as its *baroque* architecture indicates.

In 1502 Dr. Wilhelm von Hohenheim was appointed to be town physician at Villach in Karinthia. We have a trustworthy record of the thirty-two years which he spent there in a document dated May 12, 1538, four years after his death. Its purpose was to bear witness to his son's right to the property left by him, which it does in the following terms:

"We, the magistrates, council, and whole community of Villach, bear open testimony in this letter that the learned and famous Wilhelm Bombast von Hohenheim, Licentiate of Medicine, lived amongst us in Villach for thirty-two years and all the time of his residence led an honourable life and behaviour. With good will we witness to his rectitude and to his just and blameless conduct, as it is incumbent on us to do. In 1534, exactly on the birthday of our Beloved Lady, he departed this life here in Villach. May God the Almighty be merciful to his soul. Of the said Wilhelm Bombast von Hohenheim, the most honourable and learned Herr Theophrastus Bombast von Hohenheim,

Doctor in both Arts of Medicine, is son by marriage and next heir, and was held by the aforesaid Wilhelm Bombast von Hohenheim for his son by marriage and his next heir. . . . And that this letter may serve as absolutely trustworthy, we give it with the seal of the town of Villach appended."

Theophrastus was now old enough to go to school, and in Villach there was a school founded by the famous Fuggers of Augsburg, who were engaged in working the lead mines at Bleiberg, a short distance from Villach. Their Bergschule was intended to train overseers and analysts to superintend and instruct the miners and to analyse the metals and ores discovered. In his "Chronicle of Karinthia" Paracelsus wrote many years later concerning its minerals :

"At Bleiberg is a wonderful lead-ore which provides Germany, Pannonia, Turkey, and Italy with lead ; at Hütenberg, iron-ore full of specially fine steel and much alum ore, also vitriol ore of strong degree ; gold ore at St. Paternion ; also zinc ore, a very rare metal not found elsewhere in Europe, rarer than the others ; excellent cinnabar ore which is not without quicksilver, and others of the same character which cannot all be mentioned. And so the mountains of Karinthia are like a strong box which when opened with a key reveals great treasure."

Such a key was the mining begun by the

Fuggers, and the doctor and his son must often have walked through the ancient larch forests to Bleiberg on the slope of the Doberatsch to watch the processes which converted the ore through breaking up, smelting, and moulding into shapely blocks of lead.

In the Bergschule the doctor was teacher of chemistry, or of alchemy in progress towards chemistry.

Father and son lived in the Haupt Platz, or Market Place, of Villach at No. 18, and the school was in the Lederer Gasse. Theophrastus went to it daily and sat on its benches when his father taught. That the Fuggers had chosen Dr. Wilhelm von Hohenheim for this post indicates his proficiency in chemistry, and we may infer that his boy had already learnt some of its principles and knew the fascination of its experiments. His father had his own little laboratory in the house on the Market Place, in which he made his own tests. Dr. Karl Aberle saw this room in 1879 and a knob on the railing of some steps rising from the courtyard, which he was told Paracelsus had gilded.

The boy was sent to the famous Benedictine school at St. Andrew's monastery in the Lavantall for higher scholastic instruction, and it is probable that there he came in contact with Bishop Erhart, or Eberhart Baumgärtner, who helped the Fuggers in their alchemical laboratory. There is no doubt that good teaching and

his native power of exact observation equipped him for further study at this period. The climate of Karinthia would favour his physical development into fairly healthy boyhood. The country as well as Karniola had recently come through a terrific struggle with the Turks, who were driven from the very gates of Villach in 1492.

Theophrastus was now preparing for the high school, or college, probably at Basel. He was even engaged in studying the occult with his father and by help of his father's collection of books. Without a knowledge of the arts belonging to occultism it was impossible at that time to become a physician. There was no such thing as positive science. All collegiate and monastic training was founded upon authority and consisted in a degenerate and much falsified inheritance of dogma from the Greek and Roman physicians copied studiously for centuries and stultified with errors in its transference from Greek to Latin, from Latin to Arabic, and from Arabic back to mediæval Latin.

Hippocrates, the great "Father of Medicine," was succeeded in the fifth century before Christ by Aristotle the Stagyrite, who had the instinct of surpassing genius and almost sighted experimental science. He wrote on all subjects—physics, meteorology, mechanics, anatomy, physiology, biology, the vital principle, animals, parts

of animals, generation, memory, sleep, dreams, etc. His work was great and he attained to the gate if not to the strait and narrow way of science. School succeeded school of medicine for six hundred years in Greece, Alexandria, and Rome. But transference from language to language impaired and confused the bases founded by Hippocrates and Aristotle, while the Platonic transcendentalism and metaphysical obscuration disturbed logical thinking and fired men's imagination at the expense of patient investigation.

The second century of the Christian era produced Galen, a physician of Pergamos, who knew all that there was to be acquired in his time and a little more of his own, founded upon inadequate experiment. He wrote on every branch of what was comprehensively called philosophy, five hundred clever treatises, and of these one hundred have survived. His merit was that he urged the importance of anatomical knowledge. Otherwise, he dictated a system of medicine fusing theory and practice—retrograde in itself, not developed from the sound principles of Hippocrates and Aristotle—so imposing in its reduction of all departments of knowledge to authoritative assertion that it prevailed over all Europe for twelve centuries and dissent was accounted sacrilegious. While Hippocrates urged the importance of observation, Galen confounded it with theory. When

the Arabs invaded the sphere of European enlightenment, they were struck with admiration for this mass of erudition and accepted it without question.

The result was that copies were made in Arabic of Galen's treatises and of Latin versions of the Greek physicians. Avicenna and Averröes were hard-and-fast disciples of the Galenic system, fascinated by its pose of omniscience, and their support not only stamped out such illuminated protest as Roger Bacon's, but made of the decrees of Claudius Galen fetters to bind men's minds for three centuries beyond Bacon's time. As Latin was the general language of teaching, copies of the Arabic were transferred into mediæval Latin and errors increased and multiplied. To such an extent were the works of even Aristotle debased in Roger Bacon's time, that their conceptions were stultified, and in his great work the "Opus Majus," written for Pope Clement IV., the Franciscan scientist declared that "if he could he would burn all the works of the Stagyrite, since their study was not only loss of time, but the cause of error and multiplication of ignorance."

It is not wonderful that occultism supplemented dogmatic ignorance. St. Ambrose of Milan said: "The testimony of nature is more valid than the argument of doctrine." But such consultation of nature was punished as wizardry. None the less it was hazarded.

William Howitt, Friend and mystic, has written: "True mysticism consists in the direct relation of the human mind to God: false mysticism accomplishes no true community and propitiation between God and man." How should it, when it leaves the naked soul at the mercy of evil? The mind absorbed in God is shielded from assault. It was the true mysticism that Theophrastus sought to acquire, the union of his mind with the Divine Mind, that he might be enabled to understand its workings in nature.

When he went to Basel, he was already practically acquainted with surgical treatment and had helped his father in dealing with wounds. He tells us in his "Surgical Books and Writings" that he had the best of teachers and had read much written by famous men, both past and present. Amongst them he instances Bishop Erhart of Lavantall and his predecessor. Lavantall was in the valley where the Fuggers had their smelting furnaces and laboratories, and there the bishop probably attained experimental acquaintance with the alchemy of metals.

We know next to nothing of Theophrastus at Basel in 1510. The High School or University was in the hands of the scholiasts and pedants of the time. He soon became conscious that he had nothing to gain from their dull reiterations of æon-old formulas which his intellect disowned. The dust and ashes to which these barren minds deferred "had laboured and grown

famous and the fruits were best seen in a dark and groaning earth given over to a blind and endless strife with evil what of all their lore abates ? "

One incident belongs to this time. It was a fashion for scholars to adopt a latinised version of their family name and in some cases to hellenise its form. *Erasmus*, *Frobenius*, *Melancthon* are examples of such changes. The habit predominated in Basel, and Theophrastus transferred Hohenheim into *Paracelsus*. There is a tradition that his father had conferred this name on him while he was still a boy, meaning by it that he was already more learned than Celsus, a physician who lived in the time of the Emperor Augustus, and who wrote a work upon medical treatment somewhat more advanced in hygiene than was usual then. But Dr. Sudhoff and Dr. Karl Aberle agree in considering " Paracelsus " to be a paraphrase of Hohenheim carrying the " High Home " into the spiritual region, and we are safe in accepting their opinion.

From 1510 he was known by this name, and although he rarely included it in his signature, he affixed it to his greater works, those on philosophy and religion, and was universally cited by it whether in discipleship, in controversy, or in contumely.

His impatience with the outworn and almost worthless academic teaching can be imagined. He needed truth, not jargon ; order, not con-

fusion; guidance, not misleading. And all the time Roger Bacon's "Opus Majus" lay frayed and tattered at Rome and Oxford.

Paracelsus had read some manuscript by the Abbot Trithemius, perhaps a copy in his father's collection, and it decided him to go to Würzburg and seek enrolment amongst his pupils. Trithemius was called after his birthplace, Treitenheim, near Trier. His own name was Johannes Heidenberg. Even as a young Benedictine monk he was celebrated for his learning, and was made Abbot of Sponheim when he was only twenty-one years old. From Sponheim he was transferred in 1506 to the monastery of St. Jacob close to Würzburg, where he died in December 1516. He had a great renown, and more especially for occult research, believing that the hidden things of nature were in the keeping of spiritual forces. Students came to him, and if they proved themselves worthy were admitted to his study where his grim experiments were made. He was learned in all the knowledge of his day, influenced too by the Renascence, a lover of art and poetry as well as a historian and a physician, an alchemist with a nostrum of his own for all diseases, the receipt for which is quoted by Dr. Franz Hartmann.

So Paracelsus travelled the long road to Würzburg, probably in just such conditions as Erasmus describes in his letter about the

journey from Basel to Louvain. He had grown stronger, but always remained small and slight, carrying his great gifts in a frail vessel. He took a lodging at Würzburg,

> Which the Mayne
> Forsakes her course to fold as with an arm.

Trithemius was accounted dangerous by the ignorant many. He had penetrated to some of nature's hidden things, amongst them to magnetism and telepathy. In mystical experiments he had found himself able to read the thoughts of others at a distance. He used a cryptic language and a secret chronology by which he interpreted the prophetic and mystical portions of the Bible and of cabalistic writings. Above all study he insisted on that of the Holy Scriptures, for which he had a deep devotion and which he required his pupils to examine with exact and reverent care. In this he influenced Paracelsus for life, for Bible study was one of the preoccupations of his later years, and in his writings we have constant witness not only to his mastery of its language, but of its deepest spiritual significance.

That he studied occultism with the abbot and was aware of its mysterious powers is also sure, for later he sought to systematise them anew. But he shrank from its more dangerous experiments because he believed them to be opposed to the divine will, and above all he

abhorred the necromancy practised by less scrupulous men, being convinced that it opened an outlet for the forces of evil. He abjured all personal profit from the exercise of beneficent magic, and believed that only the good of others could authorise it, and particularly the healing of others under the direction of God.

Robert Browning has well defined his attitude towards all cabalistic efforts to control spirit influence for selfish purposes :

> I can abjure so well the idle arts
> These pedants strive to learn and teach ; Black Arts,
> Great Works, the Secret and Sublime, forsooth—
> Let others prize : too intimate a tie
> Connects me with our God ! A sullen friend
> To do my bidding, fallen and hateful sprites
> To help me—what are these, at best, beside
> God helping, God directing everywhere,
> So that the earth shall yield her secrets up,
> And every object there be charged to strike,
> Teach, gratify her master God appoints ?

It was with this clear purpose that he returned to active personal and experimental research. He could discern between the mental food convenient for him and that which unfitted his aspiring soul for union with God. To heal men as Christ had healed them would be best of all, and in time this union might invest him with such healing power, but in the meantime the divine behest and the divine commission had come to him to search out all means of healing with which the Creator had stored nature. In the years of his study with

Trithemius he must have felt the spiritual impulse which pushed him into the van of God's battalion, for this time was the crisis of his life and he had to choose whether to go forward into the wilderness or to surrender the high emprise. He forsook all things which could lead to worldly preferment and went out to seek wisdom with as little provision for his bodily comfort as the *poverello* of Assisi.

CHAPTER III

THE THREE PRINCIPLES

> Then first discovering my own aim's extent
> Which sought to comprehend the works of God
> And God Himself, and all God's intercourse
> With the human mind.

"ALCHEMY is to make neither gold nor silver: its use is to make the supreme essences and to direct them against diseases." This was the outcome of Hohenheim's researches in Schwatz. But when he went thither, it was with some curiosity as to the possible discovery of a combination which would transmute the baser metals into gold. He had read so much and heard so much of this fabled achievement, that it was difficult for him to escape from the glamour of its possible consummation.

He was probably about twenty-two years old when he joined Füger's little army of workers in the silver-mines and laboratories of Schwatz, and his residence there was the most influential period of his preparation for a new departure in science. The Fügers were in no way related to the Fuggers of Augsburg who mined Bleiberg. They were Counts of Fügen in the Tyrol, and

their mines were in the Tyrol about thirty kilometres from Innsprück. Sigmund Füger more particularly befriended Paracelsus, who stayed with him at Schwatz.

Paracelsus found two groups of workers—the miners with their directors and the chemists with their crucibles, retorts, and phials. The chemists were still alchemists. Their analyses and combinations belonged to occult experiment. They were seeking Nature's mysteries mysteriously with rites and offerings and old conventions; with observance of days and hours and astral influences, with conjurations and invocations and cryptic measurements and weights. They tried by all hazards to *grasp* knowledge, taking cabalistic precautions, anticipating the sudden revelation, preparing for it by fasting and meditation. Belonging to Christendom, they inherited their occult creeds and methods from a world more ancient than we can imagine, a world of which they knew nothing but in fragments and whispers and strange survivals. Sumerian, Accadian, Babylonian, Assyrian, Egyptian, Indian, Persian, Phœnician, Arab, Hebrew, Greek, Roman, Goth, Celt, Teuton, Tartar, Mongolian practised and bequeathed what they were practising. But polytheism favoured occultism more than Christianity, for polytheism *was* occultism, and from its terminology and rites the alchemists inherited theirs.

Paracelsus worked with both groups. He

learnt the risks and hardships of mining, and studied the veins of precious ore, molten by means at which he could only guess, which, flowing into fissures and cracks within the mountains, had hardened there in glittering streaks. Three forces had produced them, fire, fluidity, and solidification.

His first biographers, or rather those of them whom spite had not perverted, maintain his power of penetrating into the very soul of natural things.

"Paracelsus," wrote Peter Ramus, "entered into the innermost recesses of nature and explored and saw through the forms and faculties of metals and their origins with such incredible acumen as to cure diseases."

Melchior Adam testified that "in universal philosophy, so arduous, so arcane and so hidden, no one was his equal."

Besides his research into the nature of metals in the mines themselves, he frequented at first the laboratory where the alchemists pursued their phantom quest, and after a time left them, convinced of the futility of "gold-cooking." But their combinations and solutions, if applied to making medicines, might be developed, and he believed that all minerals subjected to analysis might yield curative and life-giving secrets and lead to new and sympathetic combinations

of value in cases of either mental or physical disease. He held as the very basis of divine creation that every substance, whether endowed with organic life or apparently lifeless, contained some variety of healing potentiality. Alchemical experiments for the sake of gold-making he realised to be no divine quest at all, and he called the men who muttered and sweated over the crucible fires in Schwatz "fools who thresh empty straw." But the crucible fires had great uses and they who claimed God's direction might turn them into purifying flames for the healing of the nations.

Paracelsus was well acquainted with the processes of experimental alchemy: at Villach and at Sponheim he had assisted at many a test, and he now began to submit the minerals at his disposal to the trial of solution, disintegration, and combination, so as to discover what treasure each held and could impart.

In his earliest work, "Archidoxa," he gave some of the results of these investigations at Schwatz. It was published nearly thirty years after his death in 1570 for the first time, although for forty years known to his pupils and disciples in manuscript form. Peter Perna in Basel was its first publisher. Theodosium Rihel published it in Strassburg later in the same year, and towards the end of the century many editions appeared. Perna's "Archidoxorum" shows, says Dr. Sudhoff, indications of hasty

editing. The order of its contents is as follows :

Concerning the mysteries of the Microcosm—

I. The first book of Renovation and Restoration.
II. Concerning the Separation of the Elements.
III. Concerning the Fifth Essence.
IV. Concerning the Arcane.
V. Concerning the Magisteriis (medicinal virtues).
VI. Concerning the Specific.
VII. Concerning Elixirs.
VIII. Concerning the Externals.
IX. Concerning Long Life.

Although ten books are mentioned in the title, there are only nine in this edition, unless we include the lecture on the Microcosm, which is printed without a numeral. Probably Perna heard of the forthcoming edition at Strassburg and hastily collected the manuscript copies from old followers of Paracelsus, printing them without due revision to forestall Rihel. The errors are numerous and are not much improved by a list of corrections at the end of a reprint.

Rihel's version is better. It is entitled "'Archidoxa' of Philip Theophrastus Paracelsus Bombast : of the highly experienced and most famous Doctor of Philosophy and of both Medi-

cines, concerning the Mysteries of Nature." Its table of contents gives us :

I. De Mysteriis Microcosmi.
II. De Mysteriis Elementarum.
III. De Mysteriis Quintæ Essentiæ.
IV. De Mysteriis Arcani.
V. De Mysteriis Extractionum.
VI. De Mysteriis Specificorum.
VII. De Mysteriis Elixir.
VIII. De Mysteriis Externis.
IX. De Renovatione and Restauratione.
X. De Vita Longa.

And at the end of this list are two supplementary treatises, " De Tinctura Physica " and " De Occultæ Philosophiæ," which do not belong to the " Archidoxa."

These books contain the therapeutics of Paracelsus. To understand them we require the aid of a glossary. It was the habit of alchemists in those days to veil their secrets from the uninitiated by expressing them in cabalistic terms. Paracelsus was familiar with those used by the Abbot Trithemius and not only adapted most of them to his own terminology, but added many other terms and phrases, some of which were imported from India and Persia. There is a glossary of these, the " Lexicon Alchemicum," compiled by Martin Ruland and published at Prague in 1612. Fifty years later it was translated into English and printed in

London, by William Johnson, who took the credit of its compilation. It is now in the collection at Geneva, called Biblioteca Chymica Curiosa, by J. F. Mangels. It is interesting to find that occultists of to-day, the Theosophists, use a cipher still. I find in one of their publications, "Light on the Path," 1908, the following words:

"In fact it is deciphering a profound cipher. All alchemical works are written in the cipher of which I speak; it has been used by the great philosophers and poets of all time. It is used systematically by the Adepts in life and knowledge, who, seemingly giving out their greatest wisdom, hide in the very words which frame it, its actual mystery."

In this glossary we find that Paracelsus calls the principle of wisdom *Adrop*, *Azane*, or *Azar*, perhaps a spiritual rendering of the so-called philosopher's stone. *Azoth* is the creative principle in nature, or the spiritual vitalising force. The *Cherio* is the *quinta-essentia* of a body, whether mineral, vegetable, or animal, its fifth principle or potency. The *Derses* is an occult breath from the earth promoting growth. The *Ilech Primum* is the primordial force or causation. *Magic* is wisdom, the conscious employment of spiritual powers to produce visible effects, as of the will, of love, of imagination—the highest power of the human spirit to control

all lower influences for the purpose of good, not sorcery.

Many pages might be given of this vocabulary, but these examples, taken from Dr. Franz Hartmann's list, sufficiently indicate its character. With its help the new system of natural philosophy which Paracelsus began to organise about 1515, after his researches in Schwatz, has been recovered in his own words. His pupils and disciples were of course provided with a key to his terminology, but its obscurity guarded his books and lectures from hostile misrepresentation.

We gather that he divided the elements discoverable in all bodies, animal, vegetable, and mineral, into water, fire, air, and earth, as did the ancient philosophy, more or less present in every body, whether organised or not, and which can be separated each from the other. To the processes of such separation, laboratories were essential with good arrangements and vessels. The ordinary fireplace did not suffice, neither did the hotter hearth of the forge. What were needed were the reflecting furnace and revolving fire, which could make the crucible glow through and through, and the Athanare or stove whose heat could be constantly maintained and increased for operations requiring protracted care. There must always be a constant supply of water, steam, sand, iron-filings, to keep the heat even and to cool

the furnace by degrees. The examination of substances in so high a temperature required a reflector and insulator. For the laboratory shelves and tables there must be good balancing scales, mortars, phials and alembics, well-glazed crucibles, cans and other vessels of glass, as well as an alembic with mouthpieces in which most of the distillations could be carried out. In such a laboratory the alchemist capable of rigorous application to his work and who is trained to minute observation can test the different substances submitted for analysis, and can extract from each its quintessence, its arcana, by which Paracelsus meant its intrinsic properties of healing value whether for external or internal use. Such properties resided in the quinta-essentia, or *virtue*, of each substance. It was often infinitesimal in quantity, even in large bodies, but none the less had power to affect the mass through and through, as a single drop of gall embitters or a few grains of saffron colour a quantity of water. Metals and half-metals, stones and their varieties are furnished with the quinta-essentia just as are organised bodies, for although held as lifeless bodies as distinguished from animals and plants they contain essences drawn from bodies that have lived.

This is a remarkable statement and when strengthened by his theory of the transmutation of metals into varying substances, a theory

held by the occultist experimentalists, but in Hohenheim's view indicating medicines, not precious metals, it shows a very advanced view of the mineral kingdom. We are urged in candour to acknowledge that Paracelsus was a true scientist, and by research of an infinitely careful character had attained glimpses of mysteries in what we call inanimate nature which are only now in process of revelation by the extraordinary discoveries of observers like Madame Curie and her collaborators.

While considering the new system of Natural Philosophy evolved by Paracelsus we must not forget that nearly four centuries of research have expired since his time, a research which he practically originated and with which he inspired the greater minds of his own and the succeeding generations. The historic spirit is of the utmost importance to its right appreciation. His great forerunner, Roger Bacon, met with obloquy and imprisonment from the mortmain of scholasticism, and up to this point Paracelsus was unaware of his stifled cry for experimental research in the thirteenth century. We must honestly face the conditions of the sixteenth century in order to appreciate what Paracelsus achieved, to realise his high ethical standards that roused unrelenting hatred in baser and mentally more clouded men, and his steadfast courage in despite of rancorous opposition.

His analyses were made with different agents—with fire, with vitriol, with vinegar, with corrosives, and with slow distillation. Metals were his main study at Schwatz, and he had for his fellow-analyst the famous Bishop Erhart of Lavantall, whom he includes in the number of his instructors. Bismuth was one of the substances which he specially analysed and which he catalogued as a half-metal. From this substance Madame Curie has eliminated *polonium*, and it may have been from bismuth that he divined the existence of active virtues in minerals which suggested processes of transmutation. He discovered zinc and classed it as a half-metal. It was one of the many additions which he made to pharmacy. Amongst them were preparations of iron, of antimony, of mercury, and of lead. Sulphur and sulphuric acid were subjects of especial interest and experiment, and represented to him a fundamental substance corporealising inflammability. He investigated amalgams with mercury, particularly the amalgam of copper; alum and its uses, and the gases arising from solution and calcination. What was left as ashes by calcination he considered the indestructible and arcane part of a substance, its salt and incorruptible.

These researches eventuated in his theory of the three basic substances necessary to all bodies. He called them sulphur, mercury, and

salt in his cipher terminology. Sulphur stands for fire, mercury for water, and salt for earth, otherwise for inflammability, fluidity, and solidity. Air he omitted, considering it a product of fire and water. All bodies, be they organised or mineral, man or metal, iron, diamond, lily, herb, were for him varied combinations of these basic elements. His teaching on the bases and qualities of matter is this theory of the Three Principles. They are the premises of all activity, the limits of all analysis, and the final constituents of all bodies. They are the soul, body, and spirit of all matter, which is *one*. But the shaping power of nature, which he called the *Archeus*, made out of matter a myriad forms, each informed with its own *alcol*, or animal soul, and each with its *ares*, or specific character. In man there is besides the *aluech*, or pure spiritual body. This shaping power of nature is an invisible and lofty spirit, nature's artist and craftsman altering the types and reproducing them. Paracelsus adopted the conceptions of *Macrocosmos* and *Microcosmos* to express the great world of the universe and the little world of the individual man, the one mirroring the other. Besides the results of his experimental research already noted, he discovered chloride and sulphate of mercury, calomel, flower of sulphur, and many distillations. Even late in the last century strawberry jam was unpleasantly associated with a

grey powder and administered in a teaspoon to unwilling children, a medicine due to the therapeutic ingenuity of Paracelsus, and zinc ointment, which prevails to this day, dates from Schwatz.

He guarded the use of all medicines in later treatises by earnest counsel to physicians to know well the diseases for which they were administered.

"For," he said, "every experiment with medicine is like employing a weapon which must be used according to its kind: as a spear to thrust, a club to fell, so also each experiment. And as a club will not thrust and a spear will not fell, neither can a medicine be used otherwise than for its own remedy. Therefore it is of the highest importance to know each thoroughly and its powers. To use experimental medicines requires an experienced man who discerns between the thrust and the blow, that is to say who has tried and mastered the nature of each kind. . . . The physician must be exactly acquainted with the illness before he can know with what medicine to conquer it. A wood-carver must use many kinds of tools in order to work out his art. So, as the physician's work is also an art, he must be well practised in the means which he employs."

Paracelsus wrote not only with a clear sense of what he wished to convey, but also with a luminousness which his illustrations accentuate. There is no involution in his style, nothing of

the tide of overwrought and tortured language which followed the Renascence. He speaks as a man having authority. In some of his writings we recognise the brief and pregnant utterance of a seer, and his thoughts are clothed in language which gives them the rank of aphorisms availing for all time :

"Faith," he says, "is a luminous star that leads the honest seeker into the mysteries of nature. You must seek your point of gravity in God and put your trust into an honest, divine, sincere, pure, and strong faith and cling to it with your whole heart and sense and thought, full of love and confidence. If you possess such a faith, God will not withhold His truth from you, but He will reveal His works credibly, visibly and consolingly." "Faith in the things of the earth should be based upon the Holy Scriptures and upon the teachings of Christ, and it will then stand upon a firm basis."

In none of his writings is this directness of style more observable than in his "Book of the Three Principles, their Forms and Operation," an abstract of which will give a clearer conception of his system than pages of description.

It was published at Basel in 1563 by Adam von Bodenstein, who tells us in an editorial preface that Paracelsus had been shamefully calumniated and that many doctors had given out as their own what they had learnt and abstracted from him.

In this little book, Paracelsus applies his doctrine of the "Three Principles" to diseases and their cures. His style bears internal evidence that the chapters contain the subject-matter of one or more lectures to his students.

He begins by laying down the premiss already noted, that every substance or growth is formed of salt, sulphur, and mercury, and is a conjunction of these three: that a threefold operation is therefore always proceeding in each body, that of cleansing through salt, of breaking up and consuming through sulphur, and of carrying away what is consumed through mercury. Salt is an alkali, sulphur an oil, mercury a liquor. Each has its own power apart from the others. In diseases which are complicated, mixed cures are necessary. Great care must be taken to understand each disease, whether it be simple, or of two kinds, or of three kinds; whether it proceeds from corporeal salt, sulphur, or mercury, and to what extent from each or all, and how it stands in relation to the adjacent parts of the body, so as to note whether liquor, alkali, or oil is to be extracted; in short, a doctor must observe the rule that two diseases should not be confused.

In the second chapter he describes the three ways in which salt cleanses and purges the body daily by virtue of the Archeus or presiding life-power in each organ, which ordains the

manner of cleansing in and for each. In the elemental world there are many kinds of alkali, as cassia, which is sweet and in minerals is called antimony; as sal gemmæ, which is sour; as acetate of tin, which is sharp; as colocynth, which is bitter. Some alkalis are natural, some are extracted, some are coagulated, and they must be used accordingly, whether for expulsion by perspiration or in the other modes.

In the third chapter the operation of sulphur corporeal as well as elemental is explained. Every sickness, he says, brought about by the superfluous in the body, has its antidote in elemental nature, so that from the genera of plants and minerals the genera of diseases can be discovered; one points out the other. Mercury takes upon itself what salt and sulphur reject—such as disease of the arteries, ligaments, articulations, joints and so on, and in such the fluid mercury must be taken in its special form which answers to the form of the disease. The *thing* in disease needs the *thing* in nature pointed out as remedy.

Paracelsus goes on to specialise the diseases arising severally out of salt, sulphur, and mercury, to be cured severally by salts, sulphuric medicines, and mercurial medicines. Diseases in their genera are divisible into branches, twigs, and leaves—so are their cures. Mercurial diseases are therefore controlled by mercurial

medicines, either common mercury, metallic mercury, or mercurial antimony, and the cures must be understood. Some contain both consolidated and incarnative strength. Mercury is manifold. Metallic mercury appears as a mineral; in juniper, *hebeno*, as a wood; in prassatella and persicaria as a plant, and yet it is the same mercury in many forms. Some ulcers are cured by persicaria, some by arsenical mercury, some by mercury of boxwood. Three things in wood are necessary for diseases: salt, sulphur, and mercury, each of two kinds, one elemental and one healing. No doctor need break into two trees to extract one cure. At the base there are only three diseases and three medicines, therefore peace to the endless chatter and cavilling about those old fiddlers, Avicenna, Mesue, and the rest!

In Chapter VI. Paracelsus insists that all diseases should be called by the name of their cure. It is better to call leprosy gold-disease, for so it is medicinally named, and the name points out the remedy. It is better to call epilepsy vitriol-disease, for it is cured by vitriol.

"My honoured predecessors have not made clear to me what evils theory has ended. The doctor's art lies in the mysteries of nature, which the old theorists locked up. But I prove my theory from nature and from its life in all generations."

The seventh chapter deals with incarnatives and their source :

" These come from mercury alone : wounds, ulcers, cancers, erysipelas can be healed only by the different mercurial powers in minerals and in plants. Every doctor must search and discover these for himself, so that he may know the things in which mercury lies, and know how to prepare each, one kind in topaz, one in a special spirit, each in the exaltation in which it is at its best, so as to extract it from the mass holding it. You will be called doctors if you can deal with each substance knowing how to extract from it. Experiment must be made, for nothing can be learnt by wishing."

The eighth chapter deals with distillation and balsams, with gums and substances which attract, and with sulphuric percussives. The whole treatise is wound up with a chapter on the Archeus, the " heart of the elements," the shaping, protecting, vitalising spirit present, in the macrocosm as in the microcosm.

" It brings a tree out of a seed. It is by the power of the elements that the tree grows and lasts and stretches itself up high. It is by this power that the animals live and move and stop. In man's body it is in every organ, which would otherwise perish ; each organ has its own kind to strengthen and renovate it—and so the power of the Archeus is in his members, the power of the macrocosm in the microcosm."

CHAPTER IV

YEARS OF TRAVEL

I go to prove my soul!
I see my way as birds their trackless way. . . .
In some time, His good time, I shall arrive;
He guides me, and the bird.

PARACELSUS stayed about ten months at Schwatz and then decided that his experience of a university having been as barren of results as if he were "in a garden where the trees were all stumps," he would "transplant himself into another garden," where the trees grow tall and bear all manner of fruits.

He was twenty-three years old when he left Villach to graduate in the university of the world. He was not prepared to settle down as a doctor and to relapse into tedium and mental stagnation. He followed what to him was a divine call, "God's great commission," sensible that the mind of the Most High had touched his own and had inspired him with apprehension of a vaster universe and potentialities physical and spiritual unknown to scholasticism, and that it called him to venture forth, a pilgrim, a pioneer, a conqueror, or a martyr.

> How know I else such glorious fate my own,
> But in the restless, irresistible force
> That works within me? Is it for human will
> To institute such impulses? . . . Be sure that God
> Ne'er dooms to waste the strength he deigns impart.

In his "Surgical Books and Writings," Paracelsus indicates his reasons for the long time spent in travel, about nine years altogether. "A doctor," he says, "cannot become efficient at the universities: how is it possible in three or four years to understand nature, astronomy, alchemy, or physic?" Physic meant medicine at that time. "It is not possible, for so much belongs to the art of a doctor that an immature boy of four-and-twenty cannot know it all and is not fit to be a doctor." "It is not only the knowledge of minerals and their medicines that makes a doctor: that makes a philosopher."

It was customary at that time for the learned to become affiliated to a secret society of alchemists, to devote themselves to alchemy and to astrology, and doubtless to learn many things, but under oath of silence. Paracelsus refused to join any such body and to be bound by any vow of secrecy. He wished to gain knowledge openly and to give its benefit to all whom it could help.

Dr. R. Julius Hartmann has lightened our task in following the course of his travels. In his "Theophrast von Hohenheim," published in 1904, he has collected the itinerary statistics

from his works and has given them to us in a masterly sequence. We can accept this safely, enriching its incidents from the discoveries of Dr. Carl Aberle and other eminent investigators.

"A doctor must be a traveller," said Paracelsus, "because he must inquire of the world. Experiment is not sufficient. Experience must verify what can be accepted or not accepted. Knowledge is experience."

In spite of his disappointment with one university, he did not avoid the others, but tried them in every country which he visited, hoping to find some kindred spirit, some one in whom was the questioning "spark from heaven."

He went first to Vienna and then to Cologne, where the universities were amongst the oldest in Europe. From Cologne he went to Paris, but we know nothing of his residence there, except that he studied local diseases.

There is in the Louvre Gallery a portrait of him at about the age of twenty-four, a very beautiful picture in oil upon wood, which at one time was in the museum of Nancy. It bears the inscription "*Famoso Doctor Paracelsus*" and is ascribed to a French or Belgian artist called Scorel, who lived from 1493 to 1562.

Dr. Aberle gives us what details have been discovered about it. There are many assertions

but few that can be verified. A replica somewhat altered used to belong to the gallery at Blenheim. The portrait now in the Louvre was till quite recently ascribed to Albrecht Dürer, just as the Blenheim portrait was ascribed to Rubens. Perhaps Scorel was a pupil of Dürer's, for style and treatment are certainly reminiscent of the great German artist. The face is beautiful, in repose, the eyes large, clear, and meditative: they look "as if where'er they gazed there stood a star." But if the eyes are those of a seer, the broad brow, the strong nose, the small, resolute mouth and the firmly moulded chin and jaw are those of a man of action. He wears a red velvet cap trimmed with fur, and his right hand holds a half-open book. Both hands rest lightly on a diagonal scroll, on which is the inscription already quoted. His hair falls in waves on either side. The background is occupied by a landscape, in the manner of the Flemish, Dutch, and Italian painters, and this represents a castle and rocks, a stone bridge and a little town, and critics have sought to identify Dinant and its Bayard rocks in this landscape.

The Blenheim replica is smaller in size but resembles the other closely. It was removed from the gallery in 1886. There are in existence many woodcuts and engravings of this portrait, the most famous being Hollar's woodcut, but it is regrettable that these vary from

the original. We can only surmise that the portrait was painted by a gifted contemporary as young as himself, either at Nancy, Paris, or Montpellier, while Paracelsus was in France.

It was in 1517, just at the time of this residence, that Ambroise Paré was born, afterwards to be called the "Father of Modern Surgery." Those who so honoured him were ignorant or oblivious of the fact that in the first edition of his works published in his lifetime, Paré acknowledged his indebtedness to Paracelsus in all that concerned the surgery of wounds. This acknowledgment was omitted from all later editions of Paré's works except from that of M. J. F. Malgaigne in 1840.

From Paris Paracelsus journeyed south to Montpellier, halting by the way wherever there was opportunity for observation. At Montpellier the Moorish system of medical training was in full force, and Paracelsus was again face to face with the Galenic theories in one of their strongholds. He was thoroughly conversant with those theories and could quote them at length by heart.

"The books of the ancients never satisfied me," he wrote afterwards, "for they are not thorough but uncertain and serve rather to mislead than to direct to the straight way."

He must have remained some length of time at Montpellier, for he often refers to his visit.

When he left France it was to make his way to Italy, where he visited Bologna, Padua, and Ferrara, centres of learning where some of the philosophers had felt the transforming touch of the Renascence.

At this time Girolamo Cardano was a boy at Milan, carrying his father's heavy books and papers when the lawyer went abroad on business, and not very kindly treated at home.

Probably Paracelsus visited Salerno as well as the northern cities, but having failed to find in Germany, France, and Italy the fundamental truths of medicine, he took ship for Spain and journeyed to Granada. "As I did not wish to submit myself to the teaching and writings of these universities," he tells us in his "Book of the Greater Surgery," "I travelled further to Granada and then to Lisbon through Spain."

He sailed from Lisbon to England, of his visit to which we have only one mention without details. But having regard to his purpose, we are justified in believing that he visited Oxford, and that some of his time was given to the lead mines in Cumberland and the tin mines in Cornwall. Perhaps he heard of Roger Bacon when he visited Oxford. The fame of this great man, obscured for three centuries, had begun to pierce through the clouds. Some effort was being made to recover his works, more serious in France than in England, for it is not to England's credit that France has

been more jealous to assert and prove his greatness than his native country, where his discoveries were appropriated to add to another man's glory.

While Paracelsus was in England, news reached him that there was fighting in the Netherlands. He left for the seat of war and applied for the post of barber-surgeon to the Dutch army. This he tells us in his "Hospital Book."

He had claimed the book of nature for authority in scientific research, and now he claimed the wounded for his book in surgery. "The sick should be the doctor's books," he counselled his students just as Hippocrates had done two thousand years earlier. War was the opportunity for enlarging his knowledge of wound-surgery, which he had already practised with his father, and he eagerly sought employment in a series of campaigns which occurred during his wander-years. Dr. Julius Hartmann thinks that he may have picked up or bought the long sword, conspicuous in all his later portraits, in the Netherlands.

In 1518, Christian II., King of Denmark, appeared with a powerful fleet before Stockholm, where in 1520 he was acknowledged King of Sweden. Paracelsus journeyed from the Netherlands to Denmark and took service as army surgeon. He was sent to Stockholm, which he naturally calls a "city of Denmark"

in the circumstances. Amongst both Danish and Swedish soldiers he pursued his healing art, observing the cures which the men themselves practised and the wonder-working beverages and febrifuges administered by the country people to their wounded. In his "Greater Surgery" he tells of a Swedish lady who compounded a miraculous drink which healed even severed veins after three doses, and he probably overcame his usual avoidance of women to secure its recipe.

He visited the mines of Sweden not only for the sake of their produce, but to make himself better acquainted with the accidents and diseases to which miners were subject. He wrote a book on the "Diseases of Miners" many years afterwards, when he had further studied them in Saxony, Bohemia, Hungary, Transylvania, Poland, and Prussia.

The minerals which he identified in Sweden and Denmark were iron, copper, zinc, lead, alum, sulphur, silver and gold. When he had finished his work and exploration, he mounted his steed and resumed his travels through Brandenburg to Prussia; then to Bohemia, Moravia, Lithuania, and Poland; then to Wallachia, Transylvania, Carniola, Croatia, Dalmatia and southwards by the coast to Fiume. He mentions these countries in several books. He seems to have had an illness in Transylvania or to have run some risk of losing his life. It

was a series of wonderful regions for his eager interest, each of them a new chair in the world-university, or as he himself has said, a new chapter in the book of nature.

We can picture him little burdened by personal baggage—his doctor's gown and beret perhaps in a sack—dressed in a serviceable doublet of strong twill, riding a hired horse from inn to inn; or taking advantage of a train of merchants on their way to some annual fair with laden pack-horses; or finding room enough in a jolting cart going to market; or in the following of a rough corps and its reckless leader; or with a string of pilgrims bound for healing well or shrine; or falling in with a band of merry lads seeking apprenticeship away from their homes; or making a comrade of pedlar, friar, gipsy, travelling journeyman, perhaps not averse to a beggar, and camping by night where he could. But it is certain that wherever he was and with whatever itinerant humanity, he was serving, helping, healing, comforting, and learning.

In towns where he sojourned a while, he was called to the houses and castles of the wealthy and was paid for the cures which he effected, so that he had money for his hostelry and food and could renew his doublet and beret as he needed. These cures won him renown indeed but hostility as well from the local practitioners, and hostility was apt to take a dangerous form.

He was a man who gave thanks in everything, and we find him praising God for the poverty of his childhood, for its coarse oaten bread and rough garments, which had made privation of no account, and had prepared him to seek the things invisible which endure, rather than the outward and visible luxury which perishes. There were patients of all kinds and conditions for him, by the roadside, in the lazar-houses, at the inns, in the villages, and for healing these his fee was some old wise woman's lotion, some soothsayer's mystic hint, some barber's trick, perhaps some executioner's grim experience. It sufficed him, for what increased his store of knowledge needed no packhorse to carry.

He probably knew Carniola well already, for it lies but a few leagues from Villach, where he doubtless rested a few weeks on his way to the south. No more beautiful region exists than the valley of the Save, with its lakes and healing waters, its sun-warmed air perfumed amongst the pines, its marvellous flora and its river like flowing aquamarine, golden orioles flashing from bush to bush upon its banks. He would reach it by a narrow pass below the robber castle of Katzenstein, where Pegam the magic horse was stalled in olden days, and he would see the tabors erected at every church porch for refuge and defence against the Turks and the cascade of fiery molten metal at Jauer-

burg, where, as the old Slovenic poem tells, "swords were fashioned to lop off the Turkish noses."

He turned at Zeugg, south of Fiume, took ship across the Adriatic to Venice and spent some time as army surgeon to the Venetians, at that time occupied against the Emperor Charles V. One of their wars was for the defence of the Island of Rhodes against Suleiman II. the Magnificent, and he seems to have been present in the campaign. Venice helped the Knights of St. John, but their efforts were unavailing, and in 1522 Rhodes was abandoned to the Soldan. This surmise is founded on his including "Rodiss" in a list of places visited and on his observations of arrow-wounds made personally. The bow and arrow were no longer used in western wars. He mentions, too, a disease which he found amongst "Saracens, Turks, Tartars, Germans, and Wallachians."

It has been said that the young Tintoretto met him in Venice and was so impressed with his appearance that he painted his portrait from life, but this has been disproved by Dr. Aberle. Tintoretto was a child of two years on his first visit to Venice and not more than four on the second. Probably some other Venetian artist was the painter. Paracelsus is represented as sitting in an old armchair, clad in a doctor's gown, his hair growing scanty over his brow, but plentiful on the side

visible. He holds the arm of his chair with the right hand. It is the portrait of a man between thirty and forty years of age, and when he was in Venice he was either not yet thirty or only just thirty. His great fatigues and privations had probably aged him even then, but the picture cannot have been painted by Tintoretto, fine although it be. It is certainly a portrait of Paracelsus and has been frequently engraved and photographed. Had he been in Venice eight years later, the ascription to Tintoretto would have been just barely credible.

He now visited the Tartars, probably the Cossacks of the Balkan Peninsula and the nomadic tribes of Southern Russia, for the term "Tartar" was indiscriminately applied to the migratory hordes which wandered over the steppes and to Turks and Cossacks in the Balkan Peninsula. He went north as far as Moscow, sharing the tent life and privations of his hosts, from whom he could learn more respecting the treatment of horses, cattle, and goats than from any western people. From them he would win the respect which a character so courageous and beneficent and a power so generously employed for others evokes from natural peoples, undegraded by self-interest, unblinded by clap-trap education.

It is said that he journeyed from Moscow to Constantinople with a Tartar prince, and spent some months there in the house of a famous

PARACELSUS.

After the portrait painted in Venice, wrongly ascribed to Tintoretto (probably 1522 or 1524).
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sorcerer. He went no farther east, nor south. He says himself: "I visited neither Asia nor Africa, although it has been so reported."

From Turks and Tartars he added to his stores of positive knowledge as well as to his acquaintance with that force which the culture of will and imagination renders powerful for either good or evil, to subdue disease or to create it, to calm and fortify or to surrender to malignant and destructive influences. We know that Paracelsus had already studied the occult and had rejected much which seemed to him "mere superstition and phantasy." He had accepted its finer doctrine of the ever-present working of the spirit of life with its miracles in elemental nature, its insight and its links with the universal, bringing the macrocosm into touch with the microcosm, so that man lives not by bread alone but by every thought of the divine.

He had probed even further in the laboratory at St. Jacob's, but recoiled from the malignant experiments of necromancy. Already he had made experiments in magnetism, in telepathy, and in psychic divination. But it was not till he had wandered with eastern nomads for a summer, till he had learned from Saracens and Turks the lore of their saints, and had wiled from Jewish physicians and astrologers the secrets of their dread Kabbala, that he became convinced of the reality of that occult

power which amongst all nations of antiquity was accounted the highest endowment of the priesthood. It was the wisdom taught to Moses at Heliopolis, the wisdom that qualified him to be the deliverer and lawgiver of his people. It was the wisdom of Solomon, who knew all created things and was accredited with control over mighty spirits. It was the wisdom of Samuel and of the prophets and was taught in the schools of the prophets, and at its highest it was and is a seeking after God. We owe to it all that the Scriptures of the Old Testament have taught us of God. It foretold the coming of Christ in the far east as in Judea; the wise men were its adepts and the kings of the east its illuminated.

Its value for Paracelsus lay in the healing power and insight with which it endows the seeker after truth. He returned from the near east with a greater reverence for the gifts invisible, for the manifold powers of a hallowed and energised will.

In the fourth Book of Defences he says:

"The universities do not teach all things, so a doctor must seek out old wives, gipsies, sorcerers, wandering tribes, old robbers, and such outlaws and take lessons from them." "We must seek for ourselves, travel through the countries, and experience much, and when we have experienced all sorts of things, we must hold fast that which is good."

Again, in the Fourth Defence he reiterates:

"My travels have developed me: no man becomes a master at home, nor finds his teacher behind the stove. For knowledge is not all locked up, but is distributed throughout the whole world. It must be sought for and captured wherever it is."

"Sicknesses wander here and there the whole length of the world, and do not remain in one place. If a man wishes to understand them he must wander too. Does not travel give more understanding than sitting behind the stove? A doctor must be an alchemist. He must therefore see the mother-earth where the minerals grow, and as the mountains won't come to him he must go to the mountains. How can an alchemist get to the working of nature unless he seeks it where the minerals lie? Is it a reproach that I have sought the minerals and found their mind and heart and kept the knowledge of them fast, so as to know how to separate the clean from the ore, to do which I have come through many hardships."

"Why did the Queen of Sheba come from the ends of the sea to hear the wisdom of Solomon? Because wisdom is a gift of God, which He gives in such a manner that men must seek it. It is true that those who do not seek it have more wealth than those who do. The doctors who sit by the stove wear chains and silk, those who travel can barely afford a smock. Those who sit by the stove eat partridges and those who follow after knowledge eat milk-soup. Although they have nothing, they know that as

Juvenal says, 'He only travels happily who has nothing.' I think it is to my praise and not to my shame that I have accomplished my travelling at little cost. And I testify that this is true concerning Nature: whoever wishes to know her must tread her books on their feet. Writing is understood by its letters, Nature by land after land, for every land is a book. Such is the *Codex Naturæ* and so must a man turn over her pages."

Paracelsus left Constantinople for Venice some time in 1522, to act as army surgeon in the war between the Emperor Charles V. and the King of France, Francis I., for the possession of Naples. The Venetians took part against the Emperor. This war lasted some years, and Paracelsus continued at his post till 1525 and was present wherever the campaign was conducted, part of the time in the Romagna. He was an experienced surgeon as well as a distinguished physician by that year and had taken his doctor's degree in both arts, probably at Salerno. He was renowned as a healer wherever he went, and had often been sent for by men of high rank whom he successfully treated for diseases given up as hopeless by the rank and file of doctors. He cured nearly a score of princes, and wherever he halted for a short time students gathered round him to watch his analyses or listen to his teaching. In Bohemia when he was examining the

minerals of the Riesengebirge, in Poland and in Slavonia, he had instructed numbers and had won many disciples. But already the practitioners of the day, doctors, barbers, friars, sorcerers, laughed his new science to scorn, spied upon his treatment and proclaimed it as their own. The simplicity of his twill doublet, for he wore his black robe only on special occasions, exposed him to their coarse derision, and his marvellous skill provoked their active malignity, so that he was sometimes obliged to escape from its hazards. In this way he fled from Prussia, Lithuania, and Poland. He says himself: "I pleased no one except the sick whom I healed."

We lose sight of him for some months of 1525. He was probably in Villach with his father. Early in 1526 he had come as far west as Wirtemberg, had settled in Tübingen to practise as a physician and surgeon, and had there gathered about him a circle of student disciples. But his stay was brief. There were too many doctors of the old school in the university town to tolerate his interference with their trade and teaching. He went to Freiburg-im-Breisgau. He preferred university towns because students were assembled in them, and it was from the younger generation that he was able to win a hearing, although the jealousy of professors and doctors alike was invariably roused by his remarkable teaching and equally

remarkable cures. The students who came to him were indisposed to submit tamely to the dull routine of Galenic instruction when they had once seized his doctrine of a living, progressive science, whose possibilities were infinite and which he obstinately defended against aspersion.

It is a wonderful page in the history of scientific progress that tells of this brave man, alone, delicate, poor, maintaining against all Europe the great cause of personal research into nature, undismayed by ill-treatment, scorn, and failure, unshaken by the combined hostility of *doctorculi* and pedagogues, steadfast to the truth to which he had dedicated his life. What chance had he against such odds? Socrates was treated with the cup of hemlock; Roger Bacon with imprisonment; Galileo with the dungeon and the rack; Giordano Bruno with the stake.

Again and again his life was threatened and he had to fly.

While he was in Wirtemberg, he visited a number of mineral springs—at Göppingen, Wildbad, Zellerbad or Liebenzell, and Nieder Baden, now called Baden Baden. He analysed their waters and declared that the last three springs had one common source, and this opinion was endorsed only last century by Walchner the geologist. He visited Liebenzell more than once and is said to have been there again in

the year of his death. Johann Reuchlin had been there in 1522 for convalescence after yellow fever, and there are many other records of the popularity of mineral springs during the whole of the fifteenth century.

Paracelsus cured the Abbess of Rottenminster on his way to Freiburg, where he was as little welcomed as at Tübingen, so he decided to try Strassburg. Here there was as yet no university, but much talk of establishing one, although the city contented itself with building an Academy some years later. Towards the end of December 1526, Paracelsus bought the citizenship of Strassburg and prepared to settle down. He was obliged by the local law to become a member of one of the civic guilds or corporations, and he chose that of the cornchandlers and millers, to which at that time surgeons were admitted. It almost seemed as if the wanderer had found a home and rest.

At Strassburg there was not so much strife between surgery and medicine as elsewhere, and a man might practise both without being held for an impostor. But no sooner was he settled than he was in demand by patients given over by the *doctorculi*, and his cures awoke the professional rancour which followed him everywhere.

He was challenged to encounter a famous upholder of the Galenic School called Vendelinus in a "Disputation," and was so disgusted

with the fluent futilities of his opponent that he would not condescend to answer them. The *doctorculi* buzzed with triumph. But the disconcerting cures went on and it became a professional duty to crush him. He was summoned to attend Philip, Markgrave of Baden, who was ill with dysentery and whose life had been despaired of. Paracelsus soon stopped the dysentery, so soon, indeed, that the household doctors insisted that they had done the healing, and that he was not worthy of his fee. It was refused by their advice and he never forgot an insult so deliberate and so unmerited.

CHAPTER V

TOWN PHYSICIAN AND LECTURER AT BASEL

Here I stand
And here I stay, be sure, till forced to flit.

When Paracelsus returned to western Europe a great change had taken place. Luther's challenge had given courage to the protest in more countries than those of Hanover, Prussia, and England. The Swiss Reformation lagged behind that of the north, because its leader, Zwingli, was not fully prepared for his great undertaking till 1518.

He was pfarrer at Einsiedeln for two years, from 1516 to 1518, and had begun to attack the peddling of indulgences from his pulpit there. The Renascence affected him quite as much as the Reformation, and it is interesting to find that his reading of the Fathers—Origen, Jerome, Chrysostom, and Augustine—in the monastery library of Einsiedeln led him to a more searching study of the New Testament, and particularly of the Pauline Epistles and Hebrews, all of which he copied into a little book from the first edition of Erasmus, which appeared in March 1516.

He made a friend of the treasurer of the monastery, and together they talked over the

coming crisis and agreed that the worship of the Virgin Mary had led Christianity away from Christ, and that the coarse expedient of selling indulgences through the medium of an itinerant friar was an insult to the pardoning mercy of God, who freely forgave the penitent. Zwingli preached against both in the cloister church of Maria Einsiedeln, and induced Abbot Conrad to take down the document which had been affixed to the gate and which offered full remission of sins for money.

He was called to Zürich at the end of 1518, to one of the minor churches, and his great services during 1519, when the plague raged in the town, led to his appointment as Canon of the Grossmünster in 1521. From that year he was the mouthpiece of the Reformation in Switzerland. He preached against fasting in Lent, maintained Scripture authority against that of the Church, and published sixty-seven "Conclusions," which contained the first public statement of the reformed faith in Switzerland, rejecting the primacy of the Pope, the Mass, the invocation of saints, fasts, pilgrimages, celibacy, and purgatory. He claimed Jesus Christ as the only Saviour and Mediator.

In 1523, at a public disputation, the magistracy declared judgment in favour of Zwingli's "Conclusions." Two further disputations were held, and at these the Bishops and the Diet refused to appear or to be represented.

The Canton of Zürich acted without them and established the reformation within its boundaries. Reformed Communion was celebrated by its whole people on Thursday, Good Friday, and Easter Sunday, in April 1525. Zwingli and Leo Judæ became responsible for the translation of the whole Swiss Bible, which was published at Zürich in 1530, four years before Luther's Bible. The Reformation spread to Basel, and with its establishment there the next important events in the life of Paracelsus were intimately concerned.

Its acceptance in Basel was mainly due to Œcolampadius, who was settled there as pastor of the Church of St. Martin and Professor of Theology in the University. He sought Zwingli's friendship, and began his work on the plan of that at Zürich. Amongst his helpers was the famous Johann Froben, whose guest, Erasmus of Rotterdam, favoured reform, although on broader and more intellectual lines than those possible at the time. Erasmus lived eight years with Froben. The latter had disabled his right foot in a fall and was suffering as much from the rough and ignorant treatment of local physicians as from the original injury. In the summer of 1526 this suffering came to a head and amputation was suggested. Happily, the fame of Paracelsus had reached Basel, and Froben sent a messenger to Strassburg to fetch him. He stayed in the house, commenced his treat-

ment at once, that of an experienced surgeon, and the cure began with the treatment. After a few weeks Froben was able not only to walk but to resume the long journeys necessary to his business of printer and bookseller. During these weeks Paracelsus made the acquaintance of Erasmus and won his fervent admiration. Erasmus consulted him by letter as to his own health, which Paracelsus found to be undermined by gout, hepatic and kidney troubles, the last apparently gravel. In his reply * he gave Erasmus a diagnosis of these, protested against the medicines which he was using, and offered to prescribe for his ailments and to cure them. To this Erasmus answered † :

" It is not unreasonable, O Physician, through whom God gives us health of body, to wish eternal health for thy soul. . . . In the liver I suffer pains, the origin of which I cannot divine. I have been aware of the kidney trouble for many years. The third ailment I do not sufficiently understand, still it seems to be probable that there is some harm. If there is any citric solution which can ameliorate the pain, I beg that thou wilt communicate it to me. . . . I cannot offer a fee equal to thy art and thy learning, but certainly a grateful spirit. Thou hast recalled Frobenius from the shades, who is my other half, and if thou restorest me thou restorest two in one. . . . Farewell,

" ERASMUS ROTERODAMUS."

* Appendix A. † Appendix B.

The insight of the diagnosis astonished Erasmus, who wished that Paracelsus could stay some length of time in Basel, and doubtless his admiration for the great physician influenced the magistrates in their decision a few weeks later.

Basel was divided on the Church question. The Catholics were led by Ludwig Bär, preacher in the cathedral and professor in the faculty of theology in the University. Œcolampadius was the head of the protesting party. He had accepted the appointment to St. Martin's Church on the condition that he need not use Catholic rites, and already he was celebrating Holy Communion in the simple fashion of the reformers, with a liturgy composed by himself. He was detested by the Catholic party. The magistrates of Basel were not all of one mind, but at Lent, 1526, the majority were in favour of the Catholics, and issued a prohibition against the slaughter and sale of animal food during the weeks of fasting.

Ludwig Bär sent a special deputation to thank them for this decree and offered as a token of gratitude to extend the inclusion of citizens to the canons' seats in the cathedral, and to give these new citizens equal protection for life and property, equal taxes and the right to belong to any guild which they preferred.

But, as the months went on, the party division became more marked and the magistracy showed

a majority for reform. Soon many of the churches were using congregational psalmody in German, and in September the magistrates issued a decision that the Gospel was to be preached freely and openly as it was contained in the four Evangels, in the Epistles of Paul, and in the Old Testament, and that all canon teaching not authorised by these was to cease. On October 29 another decree was issued, which appropriated monastic property for the use of the poor and the general welfare.

These rapid changes were due to Œcolampadius, whose personal influence had become supreme. But in the University the Catholics remained authoritative and hostile to the reformers, who sought to modify their power. The post of town physician was vacant. It was one of considerable importance, as in addition to medical care of Basel, it included a lectureship on Medicine in the University, and the superintendence of the town apothecaries, a large body living on exorbitant prices demanded for the stale drugs and disgusting decoctions of the Galenic school.

This appointment was in the gift of the magistrates, not of the University. But the faculty of medicine had the right to interfere with both the medical practice and the lecturing if the doctor appointed did not satisfy their standards and had probably advised and even decided the choice on former occasions. It

seems it had already chosen a candidate to be elected by the magistrates, who were at the discretion of Œcolampadius. He was an intimate friend of Froben and Erasmus, who were anxious to bring Paracelsus to Basel, and he probably knew the latter already.

It is not easy exactly to characterise the sympathy shown at this time by Paracelsus towards the reformers, but it must have been of a quality to win their confidence. He knew well to what a depth the Church had sunk, how it canonised ignorance and withstood progress. We shall learn from his own words what he thought of the "pfaffenzahl." In his "Five Qualifications of a Doctor" he maintained that neither priest nor monk was fit to be a physician, so ignorant, greedy, and immoral was the whole crew. The most malignant of his foes had been the friar-doctors, who had chased him out of the Markgrave Philip of Baden's sick-room and cheated him of his fee.

> Here drivelled the physician,
> Whose most infallible nostrum was at fault;
> There quaked the astrologer, whose horoscope
> Had promised him interminable years;
> Here a monk fumbled at the sick man's mouth
> With some undoubted relic—a sudary
> Of the Virgin; while another piebald knave
> Of the same brotherhood (he loved them ever)
> Was actively preparing 'neath his nose
> Such a suffumigation as, once fired,
> Had stunk the patient dead e'er he could groan.
> I cursed the doctor and upset the brother,
> Brushed past the conjuror, vowed that the first gust

> Of stench from the ingredients just alight
> Would wake a cross-grained devil in my sword
> Not easily laid : and ere an hour the prince
> Slept as he never slept since prince he was.

Browning gives the scene to the life, as Paracelsus himself recorded it.

Of Luther he wrote :

"The enemies of Luther are composed to a great extent of fanatics, knaves, bigots, and rogues. Why do you call me a medical Luther ? You do not intend to honour me by giving me that name, because you despise Luther. But I know of no other enemies of Luther than those whose kitchen prospects are interfered with by his reforms. Those whom he causes to suffer in their pockets are his enemies. I leave it to Luther to defend what he says, and I shall be responsible for what I say. Whoever is Luther's enemy deserves my contempt. That which you wish to Luther you wish also to me ; you wish us both to the fire."

Œcolampadius hoped that Paracelsus would reinforce the evangelical party in the University and urged his appointment. But it is probable that however strongly he sided with the opponents of the "pfaffenzahl," he was preoccupied with the reform of medicine and had too many contests on his own hands to desire those of other men. His convictions were certainly more nearly allied to those of the reformers than to those of the recreant ecclesiasticism.

Perhaps he was held back by some uncertainty as to how far the inrush of free thought would lead the protestants; as to what extreme the principle of secession once admitted might carry men; as to the substitution of the Bible as sole authority, without check over the inevitable and countless misconceptions of its teaching, which, as a matter of fact, have been the disruption of Protestantism. He knew the misuse of the Bible in science; was it safe from misuse by the ignorant in religion?

But when his call to Basel reached him at Strassburg towards the end of the year 1526, it came from the protestant majority in the magistracy. He accepted it, and giving up his citizenship and house in Strassburg, removed to the old university town. He found himself at once a bone of contention. At one time the university had the right to elect its own professors, but this right had fallen into abeyance with the gradual increase of civic authority. As Œcolampadius had been appointed lecturer in theology by the magistrates, he was unpopular in the University and his advocacy of Paracelsus created a prejudice against the latter. The Galenic light recommended by the medical faculty was naturally a ready-made foe. Paracelsus had lectured for only a few weeks, when the academic authorities interfered and prohibited his continuance. He appealed to the magistrates.

"They think," he wrote, "that I have neither right nor power to lecture in the college without their knowledge and consent; and they note that I explain my art of medicine in a manner not yet usual and so as to instruct every one."

It was not the contents of his lectures that annoyed them, but his departure from old methods, which prescribed explanation and commentary on the canonical systems, and for which he presumptuously offered his own experience and his own experiments. Then, too, he dared to lecture in German that all might understand, and that the new teaching might be freed from the fetters of the old. "I thank God," he wrote long afterwards, "that I was born a German man."

As a German man, he told the story of his own research in German words. But to the irate faculty it was a degradation of the dead science and its dead aphorisms to utter living truths in a living language.

England had found its own language and its Chaucer, and was soon to find its Shakespeare: Italy had found its own beautiful speech, its Dante and its Tasso: Luther was giving Germany its German Bible. Eberlin, Geiler, and Œcolampadius were preaching in German, and their congregations were singing German psalms and hymns. But what the churches welcomed was forbidden in the lecture-halls of the universities.

Paracelsus was the academic innovator. He defined what a doctor should be in German, "so that all might understand." "I am despised because I am alone, because I am new, because I am German."

In time the prohibition was withdrawn and he resumed his lectures. Crowds flocked to them, the students, the physicians of Basel, his enemies, and a small number of nobler listeners, men like Basil Amerbach, who could understand and appreciate. In addition to these was the unlearned audience whom Paracelsus invited, and all the barbers, bath-men, and alchemists in Basel, who came in their ignorance to scoff.

Dr. Julius Hartmann says:

"The glory of being the first man who taught in the German language in a German university belongs to that true German, Theophrastus von Hohenheim, to all time."

Of course men jeered that it was because he knew no Latin, although they wot well their own lie. They tried to disparage his degree and to insinuate that he had never received it. They sought to incense him that they might catch him tripping. But he went on with his lectures finding disciples amongst his students and admirers amongst the nobler spirits in his audience.

He used no red pole, no swaggering gait,

no chains and rings of gold. He sought to win confidence by careful experiment and lucid explanation. We can almost see him in the long, low-ceilinged hall clad in a plain doublet, making his chemical illustrations with a crucible and retorts on the table before him, describing each in clear language always to the point, while the beautiful Rhine flowed ever beneath the windows.

We can see him too going about the streets of Basel on his round of professional visits, dressed in grey damask, and wearing a black damask cap. The coat was often used in the laboratory and might be stained with the tinctures and medicines which he made himself, but he did not account the stains dishonourable, till they spread too far, and then he bought himself a new coat, always of grey damask and gave the old away.

He thought little of the gorgeous Basel doctors and would praise simplicity of dress coupled with knowledge and capacity of mind and hand.

"I praise the Spanish doctor," he said, remembering Granada, "because they do not go about like idle fellows finely dressed in velvet, silk, and taffeta, gold ring on the finger, silver dagger at the side, white gloves on the hands; but work day and night with patience. They are not always promenading, but seek their laboratory, wear clothes of leather and an apron of skin on which to wipe their hands; wear

no rings on their hands which they need to thrust into the charcoal and which are as black as a charcoal-burner's. That is why they use little splendour."

So he wrote in his book of the "Greater Surgery."

Whatever might be his dress, he girded on his long sword, to which he held as tenaciously as the fine doctors to their rings and red pole.

"A doctor should be full of experience, not hung about with red coats and spangles. . . . To have the name and not to do the work of a doctor is dead: the two things must go together, to be a doctor and to do a doctor's work: physicians and physic: master and mastery."

His own mastery was proved by his cures, and the other doctors were moved to jealousy and sought to subject him to the judgment of the whole medical body in Basel. The question was whether he might or might not practise in the city. The academic charter contained a clause to this effect concerning any newcomer, with a fine of thirty gulden did the newcomer disregard this condition. Paracelsus refused to submit himself to any such formality, but this attempt, in the face of his appointment by the magistrates, forced him to expostulate. He wrote to the magistrates, whom he addressed as his "grave, pious, strong, foreseeing, wise,

gracious, favourable gentlemen." In this we detect a spice of irony, for their foresight and wisdom were conspicuous by absence when they exposed their nominee to treatment from which these qualities might have protected him. He asked them to restore him to his rights. They put him in his office and they must endorse his power to exercise his duties. He had been given no notice of the faculty's power to intervene, and he had left work at Strassburg to comply with their appointment.

Another matter broached in this letter concerns the conduct of the city apothecaries. He had enraged that class by refusing to administer or prescribe their medicines, which brought them in large profits. He made his own medicines in his laboratory, and used them instead of their nauseous brews. He used his tincture of opium, which, he called labdanum, his solutions of antimony, mercury, and arsenic, his preparations of zinc, iron, and sulphur.

The apothecaries knew nothing of these. He found their stock stale and worthless, their prices absurdly high. As town physician he had the oversight of the apothecaries, and he discovered not only their carelessness and neglect, but also that they had a secret understanding with the doctors. All this may be read in his letter of expostulation. He desired that the apothecaries and their stores should be inspected, that their proceedings should be

rigorously controlled, that their recipes should be submitted to the opinion of the town physician, and that apothecaries should submit to examination before their appointment, since the bodies and lives of the sick were in their power, that medicines should be charged according to a fixed rate, and the exorbitant prices which had drained the people be ended.

This admirable appeal, brave, determined, and beneficent, had effect, and Paracelsus was freed from the immediate persecution.

On June 5, 1527, he attached a programme of his lectures to the black-board of the University inviting all to come to them. It began by greeting all students of the art of healing. He proclaimed its lofty and serious nature, a gift of God to man, and the need of developing it to new importance and to new renown. This he undertook to do, not retrogressing to the teaching of the ancients, but progressing whither nature pointed, through research into nature, where he himself had discovered and had verified by prolonged experiment and experience. He was ready to oppose obedience to old lights as if they were oracles from which one did not dare to differ. Illustrious doctors might be graduated from books, but books made not a single physician. Neither graduation, nor fluency, nor the knowledge of old languages, nor the reading of many books made a physician,

but the knowledge of things themselves and their properties. The business of a doctor was to know the different kinds of sicknesses, their causes, their symptoms and their right remedies. This he would teach, for he had won this knowledge through experience, the greatest teacher, and with much toil. He would teach it as he had learned it, and his lectures would be founded on works which he had composed concerning inward and external treatment, physic and surgery. "Let God ordain and may you apply yourselves in such a manner that our effort to advance once more the art of healing may succeed." So ended the programme and so he answered his adversaries.

A fortnight later came the Feast of St. John. The students built and lit a bonfire in front of the University. It was blazing when Paracelsus arrived, holding in his hand Avicenna's Canon of Medicine, which he flung into the flames saying: "Into St. John's Fire so that all misfortune may go into the air with the smoke." It was his challenge to the party of the old school. So Luther challenged the papacy when he burned the papal Bull and Statutes by the Elster Gate of Wittemberg. And Roger Bacon had wished that he could burn all the works of the Stagyrite. Paracelsus burned the dead and done with lore of Galen and Avicenna. It was a symbolic act, as he explained later in the "Paragranum": "What has perished

must go to the fire, it is no longer fit for use: what is true and living that the fire cannot burn." Man was in bondage to the dead Church, to the dead learning—let them be done with for ever. Night and day Paracelsus worked at his lectures, dictating them to his secretaries with extraordinary vigour, striding up and down the room, his eyes gleaming "like a man inspired."

He ignored the Basel holidays, which lasted from the middle of July to August 21, determined to retrieve the time which academic opposition had wasted, and the hall was always filled to overflowing. It was his constant aim to do his utmost for those whom he taught, "to keep back nothing which could be of use to the sick." Had not Christ made the healing of sick minds and bodies a paramount preoccupation, and therefore to His followers a paramount duty?

He supplemented lectures with practical demonstrations. The most advanced amongst his students accompanied him to the sick-beds of his patients and learned by observation of his diagnoses and his treatment. Experience, he said, was better than all the anatomy lessons of the lecture-room. If they wished to understand a disease, let them look it in the face, watch its symptoms, study its phases, measure their duration, classify for themselves its cause and the sequence of its condition, discover

its alleviations, compound themselves its remedies.

He led them into the surrounding country to study for themselves the herbal medicines "where God has placed them." How should they recognise them in tinctures and powders even skilfully compounded? Better than all books, better than physic-gardens, however complete, were the open spaces where Nature was the gardener, for there the medicines grew by choice, drawing from soil and air the virtues which made them potent, "out in Nature, which is covered by only one roof, where the apothecaries are the meadows, valleys, mountains, and forests, from whom we receive supplies for our apothecaries."

He drew them on to alchemy, to chemistry, to experiment, for they must be their own apothecaries, and must distil, combine, dissolve their own medicines, and this could be taught and developed only by constant observation and constant practice. We have a list of some of his lectures, and this alone touches many departments of medicine:

I. Concerning the degrees and components of recipes, and of natural substances.
II. Concerning diagnosis by pulse and face, and other symptoms.
III. Concerning disease arising out of acidity.
IV. Concerning diseases of the skin.

V. Concerning open wounds and ulcers.
VI. Surgical lectures on wounds received in war.
VII. Concerning pharmacy.
VIII. Concerning blood-letting.
IX. Concerning the preparation of medicines.

"I wish you to learn," he would urge, "so that if your neighbour requires your help, you will know how to give it, not to stop up your nose, like the scribe, the priest, and the Levite, from whom there was no help to be got, but to be like the good Samaritan, who was the man experienced in nature, with whom lay knowledge and help. There is no one from whom greater love is sought than from the doctor."

He took some of the poorer students into his own house, gave them food and clothing, and taught them everything. In return they acted as his secretaries, and when they knew enough, as his assistants. They had a good deal to bear, for he knew no fatigue himself and would keep them busy till after midnight. Sometimes he would rouse them from sleep because a recollection, an experience, a new line of thought had occurred to him. But these were the men whom he educated so highly that they could share his work, make experiments themselves in the laboratory, watch and report upon processes. The best man amongst them he found one day in the sick-room of a poor patient.

He asked him where he came from. "I come from Meissen," said the boy, "and have wasted my money in Heidelberg. I should like to teach this winter so as to pay for my keep."

"If you find nothing better to do," said Paracelsus, "you can come to me and I will give you keep."

The boy soon made himself known as "the studious Franz" and he earned the sobriquet by his constant devotion to his work and to his master, of whom he spoke long afterwards as his "dear teacher Theophrastus Paracelsus, of blessed memory." His diligence was rewarded, for he became a distinguished physician.

But amongst the many who came to him were some bent on their own petty and nefarious designs. His healing was supposed by them to depend on the knowledge of certain secret and magical cures which they purposed to find out while they pretended to serve him, hoping thereby to make a profit as famous doctors without the toil of study and experiment. His power rested on these last as well as on his personal influence. He had the magnificent gift which could impart courage for recovery as well as use the means that assisted it. But as men whispered in those days of magic drugs and enchantments, these baser spirits hoped to surprise him in their use and to learn them to their own advantage. His most effective drug was doubtless laudanum, of which he made

no secret, and which he gave to restore sleep to the sleepless, and to still pain and to prepare convalescence.

Probably he had a little store of opium acquired in Constantinople, from which he prepared his *Labdanum*, and which he kept concealed, perhaps in the handle of his sword. He accounted his tincture of *Labdanum* as his best chemical discovery. It was opium or *Labdanum* that cured the Markgrave Philip of Baden, and for which on waking from the slumber it had induced he thrust a jewel into his physician's hand, before Paracelsus was turned feeless from the house—a jewel which he wore to his dying day as a protest against the unmerited outrage. But what was more potent than laudanum was his faith in the power of God, his own blameless life, his deep desire to help his fellow-men. Something of the power of Christ was vouchsafed to him.

One of these time-servers, and it may be not the worst of them, although the most notorious, was Johannes Herbst, called Oporinus. In order to have money for study, he married an elderly widow, who embittered his life with her scolding. He went to Paracelsus in the hope that he might surprise the secrets with the possession of which he accredited him, and so might make fame and money on his own account. He stayed two years with him and was at first trusted and apparently faithful.

But either because he was baffled, for Paracelsus read his thoughts and knew what was in his heart, or because he was bribed by the enemies of his master, he calumniated him in the document which he published, and which in his old age he bitterly repented. Who, of the world's helpers, has not had his betrayer ?

Oporinus discovered no magic nostrum, for there was none. Paracelsus himself spoke of the use of such a nostrum as " riding all horses with one saddle, through which more harm than good is effected."

CHAPTER VI

THE LECTURE HALL

Every corner
Of the amphitheatre crammed with learned clerks,
Here Œcolampadius, looking worlds of wit,
Here Castellanus as profound as he,
Munsterus here, Frobenius there.

THE *Intimatio Theophrasti*, as Huser calls the programme in his index to the seventh volume of his collected "Books and Writings of Paracelsus," was printed at Basel and copies were still to be seen in the early years of the seventeenth century. But except for its reprints by Toxites (Michael Schütz) in his *Paragraphorum* in 1575, and by Huser in 1591, we should not now know the course of lectures given by Hohenheim during the first year of his residence in Basel, as all examples of the original impression have disappeared.

Probably the programme was introductory and was meant to lead up to a comprehensive and detailed system of physic and surgery—the new internal and external treatment—which the events of 1528 cut short, for Hohenheim's enormous productiveness during the thirteen years which followed his departure

from Basel dealt with almost every conceivable form of disease, whether suggested by outbreaks of pestilence, fevers, and epidemics, or by constitutional, accidental, and contagious maladies encountered in the daily exercise of his profession.

We may surmise that some of the lectures delivered are contained in the ten books of the "Archidoxa" and in the "Book of the Three Principles"; that the treatises on special plants, on salt, vitriol, arsenic, sulphur, antimony; on medicinal springs; on pharmacy and its preparations; on tinctures and powders; on open wounds, on ulcers and their cures; on seizures and paralysis, the fractures, contractures, and cripplings to which men are liable by accident, by failure of the processes of digestion and circulation, or by wounds received in war, belong to this period. Very important were the lectures on what constitutes a good doctor in opposition to one who, graduated in the schools, neither knows illness when he sees it nor has the experience to guide him in its treatment.

Out of this wealth of material it is not easy to select, but a brief *précis* of one or two lectures, in addition to that already introduced on his basic principles, may indicate what manner of teaching the students at Basel in 1527 and 1528 received from this inspired and inspiring reformer of medicine.

In considering these lectures, we must keep the period when he taught clearly before us, so as not to confound his point of view with the advance which medicine has made within the last century, a position to which his courage and insistence pointed the generations succeeding him. He turned his back to a dead wall and looked to the far off horizon which ever recedes as men attain.

"Le progrès des sciences rend inutile les ouvrages qui ont le plus aidé à ce progrès. Comme ces ouvrages ne servent plus, la jeunesse croit de bonne foi qu'ils n'ont jamais servi à rien."

Anatole France in these significant words has laid bare our intellectual ingratitude, our inability to realise the miracles of a past which engendered our miraculous present.

In 1571 Toxites published at Strassburg, through Christain Müller, "An Excellent Treatise, by Philip Theophrastus Paracelsus, the famous and experienced German philosopher and doctor." This book also contains lectures on four other subjects. The "Excellent Treatise" was later published as "Antimedicus" in Huser's "Surgical Books and Writings." It is a most forcible appeal from Paracelsus to his students to bring character as well as knowledge to their professional work. The edition of Toxites has the advantage of being printed

from Hohenheim's own handwriting and therefore loses nothing of its original force. We come to it after a Latin invocation to the reader and a long preface, both by Toxites.

Paracelsus indicates the "Three Qualifications which a good and perfect surgeon should possess in himself."

The first of these concerns the doctor's own character and is treated in seven particulars:

"1. He shall not consider himself competent to cure in all cases.

"2. He shall study daily and learn experience from others.

"3. He shall treat each case with assured knowledge and shall not desert nor give it up.

"4. He shall at all times be temperate, serious, chaste, living rightly, and not a boaster.

"5. He shall consider the necessity of the sick rather than his own: his art rather than his fee.

"6. He shall take all the precautions which experience and knowledge suggest not to be attacked by illness.

"7. He shall not keep a house of ill fame, nor be an executioner, nor be an apostate, nor belong to the priestcraft in any form."

He explains these seven particulars more fully:

"1. The doctors who have got themselves made doctors with money or after length of

time, read their books over in a hurry, and retain but little in their heads. But the asses go about the town just as if it were a crime for the sick to contradict a doctor. Barbers, bath-men, and others are of the same persuasion, and think they have learnt everything with blood-letting, scraping, stroking, as if that were true medical treatment, and these calves think themselves great masters, for did they not go through their examination at Nüremberg, where indeed many such do go through ?

" 2. Let a doctor be as wise and learned as possible, there comes an hour when a case puts to shame all books and all experience and startles him by its unfamiliarity, so that however learned he may be, he is lost with regard to it. This is why you must daily learn, note, observe diligently, despise no teaching nor trust in yourselves too much, and above all realise how little you can do, even although a doctor and a master. Therefore, you must be always learning, for who can do everything, or who can foresee everything, or who can know where all cures are to be found ? You must travel and accept without scorn all that comes to your hand, and do not bring to shame your degree of doctor and master. For the mock doctor is a mere puppy and a court-dandy, through whom truth and true knowledge fall into contempt.

" 3. When an ignorant doctor treats a case, all goes wrong and it is his fault, because he only thinks of the shekels. But a wise physician does not judge at a glance, nor does he think himself able to overcome all diseases ; he is

not always riding to the same patient, or promenading on the streets, for these things give no help. But if he knows that the patient can only be cured with his help, seeing no wiser doctor comes, he continues his own treatment for the sake of duty and conscience.

" 4. If a doctor is temperate, he will not be full of other matters; he will not always be talking, nor taken up with every stranger he meets, nor with love affairs, nor with fine cooking, nor with going about from shop to shop. He will be sober, free from all fraudulent tricks, will mix up no roguery with what he does. And he will refrain from unchastity, for the doctor who is not chaste is a horror. He is no good doctor, he is not to be trusted.

" 5. If a doctor only considers his own wants, he ceases to study what a doctor should be. He learns how to gossip and flatter and he knows how to coax his victuals out of monks and nuns in the cloisters, and gives advice at random that he may not want. For God gives the thief a long respite before he is hanged; he often escapes altogether. Those who lecture out of books only last still longer than the thief: they abuse the blind and are themselves blind. They are obstacles in the way. But if the doctor loves his art, cares for what the sick require, he undertakes not twenty cases but five, for we can no more approach all diseases than a mother can bring her child into an emperor's presence. If he is righteous, he does not only regard the fee, he does not say to himself: 'Get on, make your own way, concoct

prescriptions.' If he does men say: 'Now's the time! Who can make the whole world sound?' If you want honour and money and gifts from women, observe you cannot cure all the world, so off with you and leave the sick unbattered, for you know well that you only do them harm and that there is nothing else in you.

"6. They who think only of their fee need neither knowledge nor experience, for they take up an oblique position. Who will accuse thee? or say that thine is the fault? Thou knowest thy Avicenna (not very well!), thou knowest Hippocrates and ever so much more! Come what will, thou thinkest, whether death or recovery, I am not to blame, for one or the other must come. If any one but Dr. Bononiensis and an old dead sophist not so highly instructed did it, he would not know what to say. Such a doctor should not practise. Let him consult the experience of another and learn from his daily practice and advice.

"7. If a physician keep a house of ill fame, he puts medicine to shame. He makes a hospital of his house, worthless for medicine, but bringing him in money. If he is an executioner, he will kill his patients. He must keep his conscious pure and not rejoice that no one dare accuse him. He must have God before his eyes and fear Him, for God can see murder in the heart when thou art working it diligently, and He will regard neither the emperor's hushing it up nor the pope's absolution. He will settle with the murderer.

"If he is an apostate, be sure he has been worthless in the cloister, so what should he do in medicine? For monks who doctor do it out of evil motives.—If he should be an apostate of some other sort, he will make a very dubious doctor and work for the skekels. No man from the priest-crew, no one from the holy orders is fit for medicine, for medicine needs its own man and the priesthood needs its own man. No one can serve two masters; each has enough to do working for his own. The priest, too, has his own peculiarities. Fate is against him. The spirit of medicine cannot tolerate him on account of his wantonness. There are many others who should have nothing to do with surgery, such as doctors who have greedy wives and so on, for through such medicine is ruined and is only practised for the shekels.—Actors and the race of poets should not enter medicine; they are too witty, and it is not good for them to be serious."

The Second Qualification concerns the patients. A doctor must know the sick and all matters that belong to their state, as a carpenter knows his wood.

This Paracelsus treated in six particulars:

"1. A doctor must know how many kinds of tissue there are in the body, and how each kind stands in relation to the man.

"2. He must know all the bones, such as the ribs and their coverings, the difference

between one and another, their relations to each other and their articulations.

" 3. He must know all the blood vessels, the nerves, the cartilages and how they are held together.

" 4. He must know the length, number, form, condition, and purpose of each member of the body, its particular flesh, marrow, and all other details.

" 5. He must know where all emunctoria lie and how they are to be averted: also what is in every cavity of the body and everything about the intestines.

" 6. He must with all his might and being seek to understand about life and death, what the chief organs in man mean, and what each member can and may suffer."

Paracelsus explains these more fully:

" 1. If a physician does not know the varieties of human flesh, and where each kind is placed, how shall he recognise the needs of each wound and select what shall be helpful? Each several kind has its own several accident, and even if they could all be healed with one treatment, the result will be different in each case, for each has its own nature. A surgeon who does not know how to distinguish these is not suitable for the art of surgery, even though he may rank as a doctor and master. For both

these titles belong to knowledge and yet knowledge he has none.

" 2. If he does not know the bones, how shall he put right such and such an injury ? How shall he understand its nature, or what its consequences may be ? It is not enough that we handle a wound outwardly ; we must know its inward condition better than the outward, for whoever knows well the bones of the body understands a wound to the brain, a wound in the ribs, and what he may venture to do in either case and what he must not do. If he does not *know*, he falls back upon what is written and will account for it with lies and will injure the sick by neglect through his ignorance, and although he may ten times over receive the names of doctor and master, he is none the less a mere gold-seeker and a thing to be avoided by the sick.

" 3. Every vessel in the body has its own kind, and the doctor who is not acquainted with each cannot heal any, for if you do not know the degree of danger in the wound, how shall you heal it ? You know not where the veins are situated, nor how to hold them fast so that the sick man keeps his life, for these things proceed from knowledge only. And yet you may become doctor and master like other fools.

" 4. If you do not know the length, number, form, situation, and purpose of each member with all that belongs to it, it is a sign that you know nothing else, because this is the very least that you should know : you do not even know what you have got yourself and how you

hold yourself. A fine master, truly! a clever barber and bather, who must make a parade with his mouth because he can *do* nothing.

"6. A doctor must be able to look ahead and to give his verdict from observation of symptoms. It is no use boasting of scholastic learning, of books and travels. All such talk is trumpery, if he does not know!"

The Third Qualification concerns the treatment, what it behoves a doctor to know, and is divided into seven particulars:

"1. He shall know plants of every kind and understand well for what purpose they are serviceable to him.

"2. He shall know which medicines cleanse and heal quickly, which slowly, as the nature of the wounds makes advisable.

"3. He must be prepared for every possible contingency, and know what it is when it occurs.

"4. He must know what to allow and what to forbid to the sick; what is suitable and what is not suitable.

"5. He must know which medicine is of most value for the contingency and must not experiment with others which he does not understand.

"6. He must be aware of the effect of each medicine, how to strengthen or weaken it as is necessary, and he must not always harp on one string.

"7. He must despise no art nor arts, but learn from all to understand the more.

"For know, there are two kinds of doctors: those who have regard to the shekels and those who attend to the needs of the sick."

These quotations throw a lurid light on the condition of the medical profession and on the character and conduct of its practitioners in the first half of the sixteenth century. Paracelsus lost no opportunity of denouncing the latter, and that to their face, for just such men crowded into his lecture hall, and it was an act of extraordinary heroism on his part. He was compelled to denounce the shameless ignorance, insolence, and greed of the vulture doctors of his time that he might make his students good doctors and urge them to study, to make experiments, to seek truth with all their heart and mind, to set in its right place the claim of the wounded, the sick, the stricken. He did it fearlessly, perhaps not without an undercurrent of satisfaction in his exposure of the miscreant crew. He felt that his just indignation was essential to the ruin of the mischievous system which prevailed in medical craft.

To illustrate his medical teaching, we must select one or two of the treatises into which he introduced his theory of the three basic principles.

If we take that on open wounds, or diseases

of the skin, which follows the treatise just quoted in the volume edited by Toxites at Strassburg in 1571, we have a striking example of the manner in which he applied his theory. It is impossible to reproduce these lectures at their full length, because of the space which they would occupy, but what is quoted is given as much as possible in his own language.

The treatise begins with an expansion of his theory and reiterates his contention that God provides the healing means in nature alone, and that He directs their discovery and use.

"All skin wounds are occasioned by salt: as it rusts iron so it rusts the tissues of the body. Many kinds of rust or harm occur in the minerals, for each metal has its own peculiar nature; thus copper is harmed otherwise than iron. And knowledge of these helps us to recognise that such harm appears in men too. A man has a sore and it is healed by treatment. The metal too has a sore and it can be healed by treatment. What happens in the one case happens in the other; for these are the secrets of nature, the *Magnalia Artium*, with which God endows the physician. He is ordained to this wonderful knowledge, to receive it from nature's illumination, and from the sick whom he can observe and from whom he can work it out. The doctor must therefore know what harms the skin and what heals the harm, both kinds of knowledge to be found in nature.

"Salt is of such a nature that it devours

and gnaws like a hidden fire which no one can see in substantial form, or like the sting of a nettle. Note the herbs and especially the spices: their leaves, their flowers, their fruits burn like little flames; such are water-cress, mustard, nettles. So also note animals that bite and sting. All possess and set in action invisible fires, whose result is visible. Just as in the things of external nature, so is it in man. In him are salts of many kinds, which in time come to be like little flames in the body. One of these may set the other on fire, and this it does by nature's powers. Many salts, too, are to be found in trees. In some there is a kind of salt which gnaws away the wood in wormlike fashion. So in man, in wolves, in other animals there are salts, such as arsenic, which crawl about putrefying and devouring. This happens where ever salts may be, according to their nature. And there are many natures and kinds in man, so that no one harm is like another. Some salts burn like nettles, some like vitriol, some itch like lead, some blister like mustard, for all these things in men must be separated like the things in nature and classified according to this or that family and species.

"Salt works in its own kind, that is, it devours itself, but it also devours mercury and sulphur with itself, and is the cause of its own destruction, as is the case with all created things assured of destruction, which do not devour the rust, the gnawings, and the scrapings. These concern the power of nature which takes them away and destroys them. Therefore a man

must consult a doctor who knows the power of nature. For medicine is a gift, and to whom it is given he has it, and to know what nature has is the beginning of the gift. This is wisdom. For the doctor gradually becomes a physician from the illustrations, verifications, learning, and instruction of the work and revelation of nature. Therefore every doctor must understand that he be furnished with the power of medicine as God has created it, and not attempt to do without it. There is a secret fire then in the things of nature and in men, in which, when it burns, men lie like lime seething in water. For the body, just where the salt is placed and where it burns like pepper or alkali, may be compared to a fluid body. It devours the very thing which is its own body; salts of iron burn iron, salts of copper burn copper, and each part of the body has its own salt, the blood-vessels, the tissues, the marrow, the bones, the articulations, each according to its nature. Whoever knows these kinds well knows how the sores come to the body.

"There was an old saying amongst the learned that 'where the philosopher ends there the physician begins.' This means that the doctor should observe and gain experience of the active powers of natural things, so as to know them where he finds them. There are in the human body a salt of fire (flamulæ), a salt of borax, a salt of arsenic, and many others. There is no theorising about them as the ancients did, or learning about them as the philosophers did, for the sores and wounds have their laws and

there is nothing to be built on conjecture and fantasy. For the physician cannot begin until philosophy ends. These laws must be handled by themselves, and of this philosophy knows nothing.

"Our teaching is that nature has included us in her work, because man is the microcosm, and it is upon this foundation that the doctor must dedicate himself. There are wide differences between what the ancient doctors taught and what we here teach, and therefore our healing art widely differs from theirs. For we teach that what heals a man also wounds him and what has wounded will also heal him. For the nettle can be so changed that it does not burn, the flame does not scorch, the chelidony does not cicatrise. Thus similars are good in healing: such and such a salt to such and such a sore. And the things which heal a wound in nature heal the same sort of wound in man. The doctor must learn to recognise these similar wounds by learning from nature, and when nature ceases to teach from her own examples, the doctor must know what treatment to practise, else is he no doctor but a philosopher.

"The carpenter thinks out how a house should be, and so he makes it. Not so the doctor. He may not think out how a sickness should be, for he does not make it. Nature makes it and knows well how it is, and if the doctor would know, he must inquire of Nature and acquaint himself with what she teaches, for just so it will be. The carpenter hews down a tree and works with it as he needs and pleases,

but not so a doctor. Medicine does not allow itself to be carpentered as he chooses, but remains as it is, and he must so treat it. Therefore it is well to learn in the place where knowledge is to be found, and that is in its own examples, which can tell and teach nothing with the mouth, but with signs, can paint, point out, exercise the power that is in it. If Nature does not wish every man to know, she indicates her teaching to those who understand by parables and mysteries. Thus our wisdom teaches us in figures and forms and by similes, so that if we have the desire to learn, we learn inwardly through these. Has not Christ said: 'It is not given to all to understand, but to them it is and has been given'? To him only who can understand. Therefore it is reasonable to ridicule the old theories with their causes, reasons, and the like. And those who follow whither they lead, may be even more ridiculed. Such people fulfil the proverb 'A blind man leads the blind,' and if one falls into the ditch, just so many fall into medicine without recognising that it is a gift not given to every one; without knowing *knowledge*, without understanding its art, without consciousness of their own deficiency, without seeing. There are many people in our day in whom there is nothing and in whom nothing can ever be, who have neither mind nor heart for medicine, to whom the monkish doctors even are not contemptible, and who do not so much as recognise their ignorance; although the monk-doctors have tried every possible roguery before they fled

for refuge to medicine! Prove well your knowledge and your motives. For many amongst you are not doctors but have been bawlers and leaders astray."

In the next lecture Paracelsus returned to his "Three Principles":

"Salt is that body which preserves the other two from corrupting, for where there is no salt there is no corruption in process. Salt is placed in all bodies, that each may be preserved in freshness. Therefore there are many kinds of salt. So, too, there are many kinds of mercury and many kinds of sulphur. And therefore there are many kinds of trouble and going to pieces. All that has savour is salt; it may taste like pepper, still it is salt. In gentian salt is bitter, in sugar it is sweet, in sorrel acid, and yet, however different these savours are, all are salt. But all are differentiated like flesh, one like this, one like that, one the flesh of an ox, one the flesh of a fowl, one the flesh of a fish, one that of a reptile, yet all flesh, in which is the soul or life-spirit of each. But however much we may differentiate, one man will hold a particular tissue for flesh, another will not. And so one man will say that honey has no salt, but that pepper has salt. And yet both have salt, for they could not exist as honey and pepper without salt. Now, there are many kinds of salt visible, so that the doctor can see of what kinds they are, and these differentiate into many species, and as in nature so in man, each kind

according to its specific nature. The salts that man uses are of many kinds, which flow through water, which have seethed in the earth and are drawn out of it by water. Others are drawn from metals, others are coagulated, so that there are many varieties. We prepare a fine salt, a pure salt, a supreme salt, and so on. But all these salts are alike in that they all tear to pieces. Some salts tear and heal again, as do the salts of alum. For alum both devours and heals. Vitriolic salts are also visible, and in many forms. Salts of lead are of many kinds and of different natures: also salts of lime and salts which can be separated from other bodies. Note well that they do not exist for themselves, but are mixed as a third body in everything to complete it. For every substance contains metallic bodies, according to its several members. From which it follows that the metallic bodies are as liable to death as the others, for their salt is arsenic. Understand that this is the case with all the other genera of bodies. The whole earth is linked together through these bodies and with man. Throughout all men there pass the fountain veins; the salt-veins which penetrate to every part of the human body, in all regions of the earth. Some are in its pores, and as when it rains out of heaven, moisture gushes out of the pores. Earth and heaven are in the body and are separated there. And as by the action of water on the earth stones are formed, so are gravel and stone formed in the body. And this is for the physician to discover rather than for the

surgeon. Therefore the matter must be explained from the beginning; but the surgeon should know all about those sores which come of themselves, that they are due to the salts which flow throughout the anatomy, nature and being of the body. We know the thing to be so in nature and it must be all the more thoroughly investigated in medicine. In a natural state no harm occurs, because these things are in the earth and in the body. They are not visible in that state. But when they are prepared from the earth, we discover them through our art. As through the seething of salt we learn how food is torn asunder by the digestive viscera, so we make other discoveries through the preparation of alum, the fuming of lime, and so on. And as the things are sought and found, they become powerful to separate. It is man who is the artist, who brings the body into preparation and makes of it what it becomes through his art. His operation completes it. But the preparation must be the *exaltatio paroxismi*, else is there no result and the body is as useless as if it were still in the earth."

The treatise continues at length and is followed by another giving a sequence of lessons in healing the sores and diseases which come from the action of salts grown corrupt. But enough has been quoted to suggest the vitality of his teaching; its depth and reach; his quite extraordinary recognition of the universality and similarity of life in minerals, plants, and

animals, a recognition which is only now becoming a part of our positive science, although it prevailed in very early mystic teaching; his sense that the Creator has made macrocosm and microcosm interdependent in all physical essentials, so that what man needs in his own little world is provided for him in the mightier world of nature; his impassioned ethical sense of the healing virtue of a good and well-ordered life, and his detestation of ignorance, irreligion, boasting, hypocrisy, greed, and vice.

It is evident from this brief excerpt that Paracelsus was the father of homœopathy, and this is corroborated by all his writings and by the tendency of his treatment.

Perhaps a short account of his two treatises on paralytic and other seizures which disable the members may illustrate another side of his teaching. These treatises were published in the same collection of Hohenheim's works in 1571, but Dr. Sudhoff tells us that the edition of Toxites was the third, as they had been printed in 1563 in Adam von Bodenstein's collection at Basel, and in 1564 at Cologne, in the appendix of "Philosophia ad Athenienses."

Toxites gives his edition as the third, and adds to its title the quotation from Psalm cxiv.: "Not unto us, O Lord, not unto us, but to Thy name be the glory."

In Adam von Bodenstein's edition, from which the following notes are taken, Psalm lxiv.

is quoted: "They that hate me unjustly and persecute me without cause are more than the hairs upon my head. But Thy salvation, O God, doth deliver me."

A fourth edition was included in Huser's Strassburg edition in the beginning of the seventeenth century.

In the first of these treatises Paracelsus treats of the causes of paralysis and like attacks, with their results in powerless or crippled members of the body; in the second he deals with their cures and the form, length, and order of the treatment necessary to each kind of seizure. They are due, he says, to external and internal causes. The former are brought about by accidents, sudden falls, shocks, gunshot wounds, and wounds from the arrow of the cross-bow. The latter come from stoppage in the digestion or in the blood-vessels; some from gravel or stone in the kidneys which produce crookedness and lameness; some from diseases in the back and hips which produce deformity of the spine; some from disease in the intestines which are invisible and where the pain is agonising; some from diseases in the knee and foot. But sometimes the whole body becomes paralysed, and this may be caused by sudden rage. It is the worst form and affects women more than men. Anger sets the gall in action, and its heat engenders both the acid and the bitter throughout the body. Another cause is immoderate drink-

ing, which engenders and increases acidity, provokes gout and other lythiac diseases.

To heal these it is necessary that the spirit of life should reach the cause of disease and drive out its vicious strength by its own power. The special humours of the part affected must be set in motion. Therefore the medicines should be directed towards opening the pores so as to heat the pores which moisten the blood-vessels and nerves. Care must be taken that the medicines are in the same degree as the illness; if they are weaker they will not expel it. They must be serviceable in quality, because not all aperitives will do; they must have a specific fitness, so that they may specifically serve specific diseases. If the disease is in the highest degree, so that neither heat nor cold, drought nor moisture avails, then a medicine compounded of natural substances as follows may help. The main thing is to recover the life-spirit, which can recuperate and renew to the great comfort of the body. It must be restored to the members to drive out the poisoned power with its poison. By such treatment medicine may destroy the disease. And the medicine requires special consideration. No common, coarse compound will do. If the disease raises great waves of heat through the body, it needs a spirit medicine, for only a spirit can penetrate its subtle way through the whole body, for the members have torn and twisted the body as if

it were tied in knots. Great restoratives may effect a cure, such as *aurum-potabile*, *oleum solis*, *materiam perlarum*, *essentiam antimonii*, *arcana quintæ-essentiæ*, *aquavitæ*, *oleum vitrioli* and others. "And truly man cannot enough praise God with all diligence, and thank Him for His fatherly grace and goodness in giving this medicine, for it suffices."

Another treatment is through the fumes of powerful balsams as terebinth, laurel, *oleum ranarum*, *adipum gummorum*, etc. At the end he explains how to make these medicines by extract and distillation and prescribes the quantity suitable for a dose.

CHAPTER VII

PERSECUTION

"No doubt these dogmas fall not to the earth
For all their novelty and rugged setting."

SCANTY as are these quotations from the body of his doctrine, they suffice for the present to indicate the revolution which he projected. He boldly denied

The established points
Ages had sanctified and men supposed
Could never be oppugned while earth was under
And heaven above them.

He framed a system which was workable, which followed no authority except that of nature and experience, which disregarded the dead and deleterious literature of the past and opened the wholesome pages of the *Codex Naturæ*, a system which led straight to exact knowledge and rejected useless reiterations unverified by research. Paracelsus set men's feet in the right path, although it took centuries to restrict them to it. Men have in their ignorance classed him with impostors and charlatans. But he delivered us from imposture

and set before us the truth for goal and for reward.

Dr. Franz Strunz has said :

"Paracelsus was a pioneer as doctor, as student of nature, as theologian, for he beheld nature and the world as they are, and saw all things in the light of nature, so that he roused to new life, orderly induction, and comparison."

However little the Germans of his time understood him, their best thinkers of to-day generously acknowledge his importance to the German renascence ; his services to exact science, which he rescued from captivity and placed in light and liberty ; his combination of minute observation, patient research, insight and massive intellectual grasp, in the exercise of which all facts that came before him took their places in a symmetrical and comprehensive synthesis ; his wide culture and generous humanity ; his deep sense of the spiritual world within and around the natural; his consciousness that the divine and the eternal hold firm the imperfect and the transitory and in the fulness of time rescue it from its vicissitudes.

Paracelsus observed and chronicled facts not as an amateur of fragmentary knowledge, but because they led him to the mighty underlying laws whose working they signified and whose pressure on all things and through all

things he realised—laws wielded by omnipotence, working in order potent in the microcosm as in the macrocosm.

But how hard it was to make his Basel students understand either his starting-point or his reach. They wished to learn his secrets, not his knowledge. He said himself: "They will not study for their degree, but want to fly to it before their wings have grown."

Many of them came as mere boys to the college, too young, too rough, and too ignorant to understand. They were influenced against him by the faculty and by the whole medical body outside the University. His straight words concerning the profession were not calculated to propitiate its members. His cures especially in cases which the "doctorculi" had aggravated by their ignorance and maltreatment, inflamed their jealousy. It took the form of a vile crusade against him. His lectures, his treatment, his character were defamed; the most despicable insinuations against his probity were circulated. Doctors, apothecaries, and the parasitic nondescripts who bled, bathed, and tortured their unhappy clients banded together for this campaign. Professors who were his colleagues were not ashamed to join the heterogeneous crew. Their aim was to oust him from his lectureship and his practice, to be rid of this agitating interloper, who held up the mirror of truth to their in-

competency, and to restore the academic fatuity whose primeval peace he had disturbed.

Naturally the enemies of Luther and Zwingli were the promoters of this crusade, although Paracelsus considered that his contentions deserved inquiry upon grounds entirely removed from those of the Church reformers. Name after name was hurled at him: "the Luther of medicine," a "vagabond who assumed the title of doctor." The faculty fell into a very dotage of garrulous epithets. He was a "liar," a "suborner," a "fool," a "necromancer," "possessed of the devil," an "ox-head," the "forest-ass of Einsiedeln."

He was not slow to retaliate. The doctors were "a misbegotten crew of approved asses," the apothecaries were "scullions," and their potions were "foul broths."

"The doctors take more trouble to screen their movements than to maintain what concerns the sick, and the apothecaries cheat the people with their exorbitant prices and demand a gulden for messes not worth a penny."

His retorts were barbed with truth and rankled.

When the autumn holidays came, he accepted an invitation to Zürich, glad to escape the sordid fray. He was enthusiastically welcomed by the medical students there, feasted, applauded, listened to with delight. He was happy in their

company and called them his *combibones optimi*, and they responded with "our own Theophrastus." Upon this interchange of convivial compliments was founded the ludicrous accusation of habitual drunkenness which served the medical canaille of Basel for renewed attack when he returned. Considering the habits of Swiss and German burgesses both then and now, their consumption of wine and beer on every trivial occasion, it was indeed a case of the pot calling the kettle black. A banquet at either Zürich or Basel in our own day without the tankard and the toast is inconceivable, and these were as popular in the sixteenth as in the twentieth century. It was no reproach to our Tudor monarchs that they could empty a flagon of foaming ale, and the *combibones* of Paracelsus were quite as used to the thinner brew of their cantons as English royalty was to heady October. But it was a convenient contumely and the drunkards hurled their own repute with gusto at their foe.

An ill-timed death accentuated the outcry. Frobenius, whom Hohenheim had cured more than a year earlier, died suddenly of an apoplectic fit, and the "doctorculi" were jubilant. Theophrastus killed his patients as effectually as they did themselves. No doubt his wonder-working tinctures had proved too powerful. The persecution assumed a new and still more discreditable character. The stroke was brought

on by a journey on horseback taken by Frobenius, against Hohenheim's advice, to the Book Fair at Frankfort. But it served the purpose of his calumniators, who contemned truth as an ill servant. Insulting and anonymous letters were left at his house accusing himself and his medicines of murder. One of these indicated his "holy laudanum," the tincture whose recipe his foes had vainly sought to steal. As he said himself, he "would rather laugh than growl at them, but they had libelled and slandered the basis of his medicine and attempted to get him out of the way."

It was his system that he fought for, the system so dearly bought, of whose importance he was convinced, for whose sake he stood alone against the world.

His enemies reached the climax one Sunday morning when on the doors of the Cathedral, the churches of St. Martin and St. Peter, and on that of the new Exchange, they affixed a document compiled in excellent Latin and purporting to be a letter from the shade of Galen. It was the habit of some members of the tribe to sit just below Hohenheim's desk at the University, to make notes of his invectives against Galen and Avicenna and to record his mordant attacks on the whole farcical faculty of medicine in Basel. These men were the agents of his foes, who constructed the lampoon. Roughly translated, it runs as follows :

THE SHADE OF GALEN AGAINST THEOPHRASTUS, OR RATHER CACOPHRASTUS

Hear, thou who dost soil the glorious renown of my name.
A talker to thee, an idiot am I, in good sooth ?
Thou sayest of Machaon's art I hold not the feeblest experience,
Or having it failed in practice expert to employ it.
Unbearable ! have I not known the commonest simples ?
Onions and garlic and hellebore, well do I know them.
Hellebore I send unto thee, a cure for brains that are addled :
I send it as well as all others which benefit fools and the witless !
True 'tis I know not thy mad alchemical vapourings,
I know not what *Ares* may be, nor what *Yliadus*,
Know not thy tinctures, thy liquors divine of *Taphneus*
Nor *Archeus*, thy spirit preserver of everything living in all things.
All Africa bears not so many portentous creations.
And yet, thou nonsensical fool, thou contendest in parley with me !
Art thou itching to measure with mine thy weapons in wrath,
Thou who answeredst nothing to Wendolin's well-reasoned word ?
I doubt me if thou art worthy to carry Hippocrates' wash-pot
Or even art fit to give food to my swine or to herd them.
Hast thou made thyself pinions that fell from the wings of a crow ?
Thy glory is false and abides scarce a moment in view.
Hast thou read ? Thou shalt lose what in cunning of speech thou hast won
And thy works of deceit will bring thee to poverty's pain.
What wilt do, thou insane, when within and without thou art known ?
Good counsel it were to hang thyself up by the neck.
" Let us live," doth he say, " we can always change our abode ;
If imposture avail not, some other adventure I plan :
What if a second Athenas, a universe new I proclaim ?
Not one of the audience I speak to can so much as guess what I mean."
The Stygian law here forbids me to speak with thee further to-day.
Enough for thee now to digest ! Reader and friend, fare thee well !

Out of Hell.*

" A spiteful and scurrilous fabrication," Dr.

* Appendix C.

Julius Hartmann calls it, and a public insult to the honour of a deeply injured man. While his cowardly foes confined themselves to anonymous slanders, he did not condescend to retaliate. But this lampoon carried their persecution too far. It was the work of neither barber nor bathman. The apothecaries had not learning enough to contrive it. It bore internal evidence of being constructed by one of the medical faculty conversant with Latin, conversant too with his system and with his lectures. It was this which wounded him to the quick. He had poured out the treasures of his research and his induction to men who treated them as fantastic ravings and himself as a madman. In vain his skilful care of the sick, in vain his cures, his rational treatment, his reform of drugs, his reverence for a duty which he esteemed as no less than sacred.

He addressed an indignant appeal to the Town Council—no deferential petition, but a demand for rigorous intervention against his slanderers:

"In unbearable anger and distress it is fitting that the sufferer should call upon the magistrates to protect, counsel, and help him. If he has been silent concerning the many slanderous letters sent to him, it is now impossible for him patiently to suffer such an injurious libel and outrage as this which has now been openly posted up. From the tenor of the lampoon

it is evident that the author is one of his daily listeners. He had already suspected that there were some who instigated and suborned other doctors of medicine to write against him. But now, he demanded that the whole body of his hearers should be summoned and examined so as to discover who wrote the lampoon that the libeller might be dealt with as he deserved. . . . He could not himself vouch that his temperament might not urge him to say or do something injudicious were he to receive no support in this matter, or were he to be further incensed. In no circumstances would he suffer more insolence."

"These things have I pointed out to you, my strict, wise, noble gentlemen, to whom I commend myself with dutiful submission, your obedient subject,

"THEOPHRASTUS VON HOHENHEIM,
"Doctor of Medicine and City Physician."

We discern between the lines an indignant contempt for the "strict, wise, noble gentlemen" who had neither the power nor the wit to protect him. He sent a copy of the lampoon along with his letter, so that nothing might be wanting to endorse his demand.

Outwardly he mastered himself and kept back the vituperation which would have relieved him, but in private he spoke his mind. "Even a turtle-dove would be enraged by these sordid beasts." "Knaves did it: shall I be a lamb? rather do they turn me into a wolf."

Amongst his friends he let himself go, and invented new nicknames for his foes, of which the mildest were "Dr. Simpleton" for the doctors and "scullery-cooks" for the apothecaries. He continued his daily duties undauntedly: the sick believed in him and his ignorant rivals were powerless to rob him of his skill or his patients of their faith. No longer were the poor of Basel sacrificed to the greed of simpleton, scullion, and barber. The most virulent enmity could not damage his reputation as a physician, but it could do worse.

It happened that at this crisis a certain wealthy canon of the Cathedral, called Liechtenfels, was attacked by an illness, and offered a hundred gulden to whoever should cure him. Many tried and failed. The Catholic dignitary would have nothing to do with Paracelsus, the friend of Basel's reformers, until death stared him in the face and would not be scared by foul air, foul brews, and orations. So at last he sent for Hohenheim, who in three days relieved him of pain and sleeplessness. It was too easily done, and the ugly story of man's ingratitude has to be told again. Canon Liechtenfels refused to pay what he had promised and tried to put off his healer with six gulden and his compliments, "knowing his life's worth best."

The insult broke down Hohenheim's brave self-repression. His displeasure was volcanic,

He gave counsel and medicine to the poor for nothing, but from a wealthy priest the promised fee was his due and he appealed to the law, such as it was, in Basel. The law refused to endorse the validity of Liechtenfels' promise, and adjudicated the six guldens a sufficient fee for visits and medicine.

This gross miscarriage of justice, coming so soon after the lampoon, upset the last reserve of Hohenheim's discretion. He had been insulted on every hand. His character, his learning, his skill had been made the derision of fools; the magistrates had failed to avenge him; the judges had betrayed and insulted him. He could bear no more: he would pay them out in their own coin. He wrote a "flying-sheet" in which he took the judges to task for their shameful verdict and gave free vent to his anger and scorn:

"How should *they* understand the value of his medicines? *Their* method was to vilify the physician. Should a sick man be healed they must needs tell him not to pay for his cure, so that the sick and the law judged of healing as if it were shoemaking."

We can find no libel in these well-deserved strictures, but apparently the sensitive souls of Basel's judges suffered, and orders were given that Paracelsus should be seized and imprisoned. The city was in an uproar. His enemies were

triumphant. It was said that he was to be outlawed and exiled to an island on the Lake of Lucerne. His friends warned him secretly and he left Basel during the night. This was early in the year 1528. His revenge was to come, and it was drastic.

Browning holds that the supposed illness of Canon Liechtenfels was a deliberate scheme to incense Paracelsus, and this is only too possible. The poet puts into Hohenheim's mouth a probable version of the whole episode of his professorial life at Basel :

> Just so long as I was pleased
> To play off the mere antics of my art,
> Fantastic gambols leading to no end,
> I got huge praise ; but one can ne'er keep down
> Our foolish nature's weakness. There they flocked,
> Poor devils, jostling, swearing, and perspiring,
> Till the walls rang again, and all for me !
> I had a kindness for them which was right ;
> But then I stopped not till I tacked to that
> A trust in them and a respect—a sort
> Of sympathy for them ; I must needs begin
> To *teach* them, not amaze them, " to impart
> The spirit which should investigate the search
> Of truth," just what you bade me ! I spoke out
> Forthwith a mighty squadron in disgust,
> Filed off—" the sifted chaff of the sack," I said,
> Redoubling my endeavours to secure
> The rest. When lo ! one man had tarried so long
> Only to ascertain if I supported
> This tenet of his or that ; another loved
> To hear impartially before he judged
> And having heard, now judged ; this bland disciple
> Passed for my dupe, but all along it seems
> Spied error where his neighbours marvelled most.
> . . . . The end
> Was a clear class-room and a quiet leer

From grave folk, and a sour reproachful glance
From those in chief who, cap in hand, installed
The new professor scarce a year before ;
And a vast flourish about patient merit
Obscured a while by flashy tricks, but sure
Sooner or later to emerge in splendour—
Of which the example was some luckless wight
Whom my arrival had discomfited,
But now it seems the general voice recalled,
To fill my chair and so efface the stain
Basel had long incurred. I sought no better,
Only a quiet dismissal from my post,
And from my heart I wished them better suited
And better served. Good-night to Basel then !
But fast as I proposed to rid the tribe
Of my obnoxious back I could not spare them
The pleasure of a parting kick !

This "parting kick," the flying-sheet, was mild compared to the chastisement of the deliberate indictments and invectives which he drew up for the preface to his "Buch Paragranum." The Basel of 1528 is pilloried in these to all time, and as they embody his defence against accusation, insult, and calumny, they belong rather to this chapter than to that more especially concerned with the "Paragranum":

"When I had made known the errors of medicine," he wrote, "on no trivial grounds of guess-work, but from close observation of many diseases, the doctors were highly incensed thereby; not only those whom my arguments touched, but the ignorant crew as well, who knew nothing of medicine, but who were stirred up to take part against me and to

put me to open shame concerning my teaching. On behalf of my present as well as my future standing, I write this book 'Paragranum,' and treat in it of the sources of my knowledge, sources outside of which no doctor can be developed, and I shall reveal myself so fully in this that my very heart shall be laid open, for which I shall doubtless excite in those people not merely opposition, but bloodthirsty rage, a thing of no importance to me should my book serve for the good of the sick. . . . I neither reproach nor slander, as will be imagined, but exercise the privilege of authority to bring error to light and to hold up offences to their merited punishment with well-grounded explanation and without anger. What I maintain will be better propounded in my future writings, with greater practice and special experiment, although I expect to meet with just the same treatment.

"I have written already much that affects my enemies, and above all concerning their impositions, how enormously the prices of drugs, whether of wood or mercury, or purgatives, are kept up by the doctors, and how senselessly they practise cauterising, cutting, burning on every pretext. I have had to suffer contempt for my other writings—those concerning acidity, the origin of pustules, pharmacy, the method of letting blood, and all that I have written in the 'Paragraphorum,' writings which they do not understand. They even proposed to expel me to the Island called of Pontius Pilate. Therefore I remain in Germany, the soil on

which my pillars of medicine shall stand, and I ask those of you who have read my writings to judge whether they shall be discontinued, or whether I shall go on writing. I undertake to explain briefly how they attempt to reveal my folly and reveal their own, to show up my experience and show up their own, to lay bare my reason and truth and lay bare their own evident to all men, their inward heart which resembles the outward doctor.

"They reproach me that my writings are not like theirs; that is the fault of their understanding, not my fault, for my writings are well rooted in experiment and evidence and will grow and bear their young shoots when the right may-time comes. They have good cause to complain of my writings, for no one cries out unless he is hurt; no one is hurt unless he is sensitive; no one is sensitive unless he is transitory and not eternal. They cry out because their art is destructible and mortal; what is mortal cries out, and they are mortal and cry out against me.

"The art of medicine does not cry out against me, for it is immortal and set upon such an eternal foundation that heaven and earth shall be shattered e'er medicine perish. So long as I am at peace with medicine, how can the outcry of a doctor trouble me? They cry out because I wound them; it is a sign that they themselves are sick in a dying medicine; the symptoms of their sickness are their strife against me, because they are not willing to be discovered and exposed. . . . I seek the

foundations of my writings in knowledge, learning, experience, and duty, and so break up their attack and their arguments against me, for each of them wields a different argument, although in medicine there is but one source which cannot be destroyed. And their arguments are developed from fragments, therefore the doctor defends this, the bachelor of medicine that, the barber this other, and the bathman what is left.

"Their worst contention against me is that I do not come out of their schools, nor write out of their erudition. Did I so write, how should I escape punishment for lying, for the old writings are manifestly false. What then should be developed from them except falsehood? Should I write the truth about their medicine, about its students, masters, and preceptors, I should need to band them all together shouting out what medicine is, for their outcry needs to be exposed just as much as their art. So, if I attempt to write the truth about them, I must point out those bases upon which true medicine stands, that people may recognise whether I have or have not authority.

"I place the foundation of which I write upon four columns, Philosophy, Astronomy, Alchemy, and Virtue: upon these four I rely, on each will I dwell, noting whether any physician who stands outside the four will rise up against me. Scorners are they of Philosophy; scorners of Astronomy; scorners of Alchemy; scorners of the Virtues. How shall they escape the scorn of the sick since they despise what

true medicine gives to the sick? For with the same measure with which they mete will it be meted to them again, and their works will bring them to contempt.

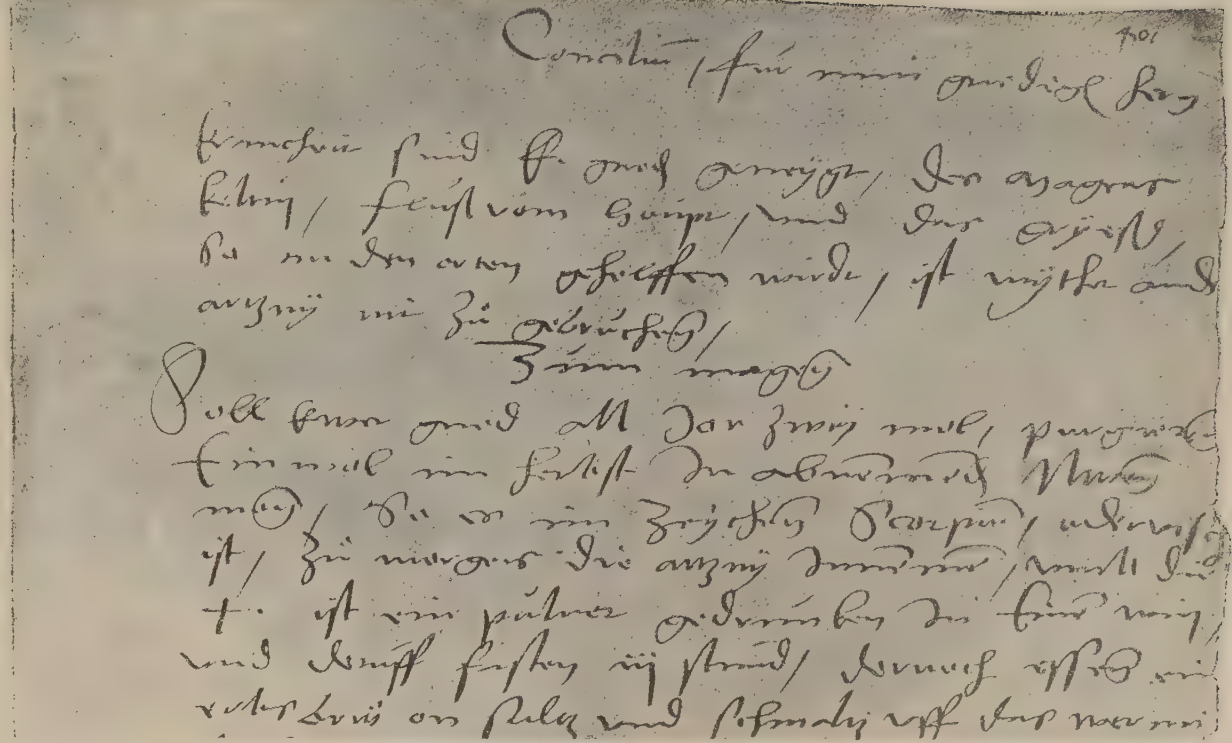
"Christ was the source of blessedness, for which He was scorned, but the true scorn overtook the scorners when neither they nor Jerusalem remained. And I may well compare the doctors of the Schools and the barbers and bathmen to the hypocrites who loved the highest seats in the assembly of scorners. There is no doctor except the man who becomes one from the foundation of the four pillars. He must collect his knowledge from these four; it is they who make the doctor, not the man; they are knowledge of all sickness, they are its symptoms; they are medicines; in them lies the physician's healing; in them too lie the faith and hope of the sick, as in the Cross of Christ lies the resurrection of the dead.

"And because I write from the true source of medicine, I must be rejected, and you who are born neither of the true origin nor of the true heredity must adhere to the spurious art which raises itself beside the true. Who is there amongst the instructed who would not prefer what is grounded on a rock to what is grounded on sand? Only the abandoned academic Bacchantes who bear the name of doctor must suffer no deposition! They abide, painted doctors, and if they were not painted with this title, who would recognise them? Their works would certainly not reveal them. Outwardly they are beautiful, inwardly they are squalid

dunces. What instructed and experienced man desires a doctor who is only an outward show? None; but the simpletons desire him. What then is the origin of that medicine which no instructed man desires, from which no Philosophy issues, in which no Astronomy can be noted, in which no Alchemy is practised, and in which there is no vestige of Virtue? And because I point out these things essential in a physician, I must needs have my name changed by them and be called Cacophrastus, I, who am Theophrastus, both by my christening and for my art's sake.

"Understand then thoroughly that I make clear the bases of medicine upon which I stand and will stand: Philosophy, Astronomy, Alchemy, and the Virtues.

"The first pillar, Philosophy, is the knowledge of earth and water: the next, Astronomy, with Astrology, is full of knowledge of air and fire: the next, Alchemy, is knowledge through experiment, preparation, and fulfilment of the four elements mentioned; and the fourth pillar, Virtue, should be in and remain in the doctor until death, for this completes and preserves the other three. And mark me—for you too must enter here and come to understand the three pillars, else it will be known by the very peasants in the villages that your trade is to physic princes and lords, towns and countries, through lies and deception only and that you neither know your trade nor the truth, for the education which prepares you fits you for fools and hypocrites, all you supposed physicians.



FACSIMILE OF HANDWRITING OF PARACELSUS.

p. 144]

And as I take the four pillars so must you take them too and follow after me, not I after you.

"Follow after me, Avicenna, Galen, Rhasis, Montagnana, Mesue. Follow you me and not I you, ye from Paris, from Montpellier, from Wirtemberg, from Meissen, from Cologne, from Vienna, from the Danube, the Rhine, and the Islands of the sea: Italy, Dalmatia, Sarmatia, Athens: Greek, Arab, Israelite, follow you me and not I you: of you will no one survive, not even in the most distant corner. *I* shall be monarch and mine will be the monarchy, which shall bind all your countries. . . .

"How will you shouters endure it when your Cacophrastus becomes a prince of the monarchy and you become chimney-sweeps? How will it seem to you when the sect of Theophrastus triumphs and you are driven into my philosophy? . . . O poor soul of Galen, had he but lived in immortal medicine his shade had not been flung into the abyss of hell, whence he wrote to me a letter dated from hell. I had not thought, I had not imagined that the prince of doctors would have been sent to the devil's stronghold: certainly his disciples must follow after him. Is that a prince of medicine and shall medicine be founded upon him? Then must doctors be the greatest rogues under the sun, and in sooth they prove well that they faithfully follow in his steps."

It is impossible not to sympathise with the honest sarcasm of this sorely wounded man, whose knowledge generously offered to all had

been rejected, insulted, treated with foulest contumely. Paracelsus knew that he was right; he never doubted that his light came from God, was "God's lamp, whose splendour soon or late should pierce the gloom."

Ten years after his death, his doctrine was taught at Basel. Basel was "driven into his philosophy." He has been blamed for expressing his anger in terms of fierce contempt. Fifteen centuries before Paracelsus there was a Healer, in whom he believed, who used no mincing words to veil His indignant grief that the men whom He came to save received Him not. Hypocrites, liars, vipers, "an evil and adulterous generation," "thou whited sepulchre" form no feeble category of epithets under which Christ classed His foes.

It is in this Introduction to the book "Paragranum" that Paracelsus alludes to the attempt of his enemies to involve him in what they called Luther's heresy. He says:

"Serpents are you and I expect poison from you. With what insolence have you blazoned out that I am the Luther of Medicine, with the interpretation that I am a heresiarch. I am *Theophrastus* and more so than him to whom you compare me. I am that and am monarch of doctors as well, and may inform you of what you are not willing to know. Luther can justify his own affairs, and I will account for mine, and will surpass those marvels which you sum

up against me: to that the *arcana* will exalt me. Who are Luther's foes? the very gang that hates me. And what you wish to him you wish to me—to the fire with us both. The heavens did not make me a doctor, God made me one: it is not the business of the heavens but a gift of God. I can rejoice that rogues are my foes, for the truth has no foes except liars. I need wear no harness, no coat of mail against you, for you are neither very learned nor very experienced, since what you bring against me are the merest trifles. I will guard my monarchy with *arcana*, not such as the apothecaries brew, foul broths. But you must guard yourselves with dilly-daddles and sugar-candies. How long think you they will last? You scoundrels, you have sought to drag me under the harrow, but for the harrow your own backs will be bared and into your own wolf-traps will you fall. . . .

"I tell you the down on my chin knows more than you and all your writers, my shoebuckles are more learned than Galen and Avicenna, and my beard has more experience than all your universities. . . . God will make other doctors who will understand the four elements—and magic, the Kabala, which to you are as cataract in your eyes: they will be geomantists, adepts, archei, spagyrists: they will possess the *arcana*, they will have the tinctures. Where will your foul broths be then? Who will then redden the thin lips of your wives and wipe their sharp little noses? The devil with a hunger-napkin."

He takes them to account point after point for their ignorance of healing definite diseases, as anthrax and pestilence ; for their carelessness in diagnosis, for their disregard of the pulse and its suggestion of symptoms.

" Remember these things," he concludes, " so that you may come into the higher medicine and not into that which neither God nor nature has planned, so that you may tread in the straight paths which I have pointed out to you in many volumes written from the source of the four pillars, Philosophy, Astronomy, Alchemy, and the Virtues : wherein it is my desire to urge you, my listeners, that you may accept nothing outside these four corner-stones upon which I base what follows, so that you may comprehend the foundation and the origin of my writings and reflect on them and on what is opposed to them, each according to its basis, value, and practical worth.

" *Dixi.*"

CHAPTER VIII

NO ABIDING CITY

I will fight the battle out ; a little spent
Perhaps, but still an able combatant.

PARACELSUS grieved to leave the city to which his work amongst the poor, his lectures, and a few understanding friends had greatly endeared him, the battle with his foes perhaps not hindering, since he was a proved Titan amongst the pigmies, who in the end had overcome by pitiable intrigue. Amongst his friends was the humanist Boniface Amerbach, the son of a printer in Basel, who died in 1514, Johann Amerbach, a man of great learning in his day who published a fine edition of the works of St. Augustine, as well as other patristic literature. He had another son called Basil, and both these men belonged to the best culture of the renascence.

Of Boniface we know that he was a close friend of Erasmus, who made him his heir, and of Hans Holbein, to whom he was helpful. At this time he was Professor of Law at Basel, and to him Paracelsus wrote two letters from Colmar soon after his flight. The flight was

urgent. Had he lingered another hour, he would have been a prisoner at the instigation of the judges of Basel. But once out of the canton he was free from their jurisdiction.

Much that we know of his faring hither and thither during the spring and summer of 1528 we learn from these two letters, whose originals are preserved in the ecclesiastical archives of Basel. Up to March 4, which is the date of the first, he had heard nothing from Basel or its authorities. "Perhaps," he wrote, "I spoke somewhat too freely against the magistrates and others, but what does it matter since I am able to answer the accusations made against me, as I have always maintained?" He claims justification for encountering as he did the virulent attacks made upon his honour and his truthfulness. "Truth draws hatred, first hatred from my professional fellows, then hatred, anger, envy from magistrates and judges." And he asks Amerbach to defend his friend Theophrastus when his enemies accuse him.

He seems now to have dedicated himself to fight out the battle with what he called the "Aristotelian Swarm."

"I am not afraid of them," he wrote in the first Book of the "Paramirum," "but I am afraid of the discredit which they will thrust upon me and of the out-of-date Law, Custom, and Order which they call Jurisprudence."

We know already something of his campaign in the Introduction to his book " Paragranum," which was not written until after he had finished the " Paramirum."

The fugitive made his way into Alsace and halted at Ensisheim to see a meteoric stone which had fallen there a year before his own birth, and which may still be seen in the Town Hall. It was in the choir of the church when Paracelsus saw and examined it. He declared its components to be stone and iron and its weight 110 lb., much to the consternation of the superstitious townspeople, by whom it was cherished as miraculous and who had exaggerated its weight to 380 lb.

Paracelsus, who knew that the whole universe was the outcome of one logical conception, found no incongruity in the discovery of well-known minerals doubtless included in the whole. The inscription is still to be read and records in doggerel how the stone fell near the gate of Ensisheim during a tremendous storm of thunder and lightning, and how it was brought to the church in a solemn procession with chanting of psalms. In his book " Concerning Meteors," which was not published till 1569, Paracelsus describes this stone.

He went on to Rufach the same day, and was there the guest of Dr. Valentine Boltz, a man of sympathetic mind, a learned humanist, who in later years edited " Six Comedies of Terence."

They continued to be friends for the remainder of Hohenheim's life, and in the year before he died he dedicated a treatise against the Anabaptists and other anti-Christians to Valentine Boltz.

Paracelsus did not tarry long at Rufach, however, but hastened to Colmar, the capital of Upper Alsace, where for a few days he stayed with Dr. Lorenz Fries, a famous physician with whom he had already corresponded. He was a man like all the friends of Paracelsus, learned, cultured, moderate. These friends were the best products of the German renascence, neither bigoted Catholics nor frenzied Protestants, men who desired the reformation of the Church and the universities, but who deprecated revolution. Such men had the progress of science at heart, and could appreciate the new system of research and exact record. They could console him with their comprehension and restore his lacerated self-respect with their sympathy.

Dr. Lorenz Fries, although of the Galenic School, welcomed the famous antagonist of the Schools to Colmar. From this house he wrote the first of his letters to Amerbach, saying that he had found in the home of Dr. Fries "what he had sought after the storm, safety and bearable quiet days."

Dr. Fries had suffered for his own opinions, although these in no way impugned the ancient teaching. He advocated the use of German

instead of Latin at the universities, so that medical instruction might be open to those who knew no Latin. Just at the time when Paracelsus was his guest, he was writing his defence against accusations on this account. Four years later he published his "Mirror of Medicine," in which he says:

"Methinks German is not less worthy to express all things than are Greek, Hebrew, Latin, Italian, Spanish, French, into which languages we find every matter interpreted. Shall our language be of less importance? No, rather of more, because it is an original language, not patched together of Greek and Latin like French."

He would receive the heartiest sympathy and encouragement from Paracelsus, who had suffered for the same cause, and this community of conviction would keep other differences in abeyance.

When Paracelsus left Basel, he took nothing with him, except perhaps his most precious drugs. But when he felt himself secure at Colmar, he sent for Oporinus and his luggage. When they arrived he hired a lodging with a cellar and set up his laboratory in the latter. He needed no great display of apparatus, only "a fireplace, coals, bellows, tongs, hammer, crucible, and ashes of good beechwood." The retorts and phials would be in the *Vasa Chymica* brought by his secretary. Dr. Fries knew Hohenheim's

fame as a healer and was probably interested in the tinctures, essences, and mineral drugs which could in no way injure Galen's reputation.

In both letters to Professor Amerbach, Paracelsus mentions that a great number of sick persons sought his help and kept him longer in Colmar than he had intended to stay. He made some valuable friends there and amongst them were two Catholics who remained loyal to their Church during those years of stormy controversy. This fact alters somewhat the aspect of the Basel persecution, which has been ascribed to bitter antagonism from the Catholic party there, but which was probably far more due to rancorous professional jealousy. Paracelsus, however much he sympathised with the reformers, never left the Catholic Church. Like Erasmus, he was for reform not for disruption.

These two citizens were Hieronymus Boner and Konrad Wickram, to both of whom he dedicated books written at Colmar. Boner, like Dr. Fries, was a humanist, a deeply interested student of Greek and Latin literature, and a translator of Thucydides, Demosthenes, and Herodotus. Paracelsus speaks of both as men to whom he was warmly attached. It is pleasant to think of this quiet haven from insult and persecution for the harassed man whom labour, privation, and suffering had prematurely aged. He was now barely thirty-five years of age,

but looked nearer fifty. He took little rest or recreation, although surrounded by sympathetic friends. He was busy with patients in Colmar, in other parts of Alsace, and across the Vosges. Oporinus was kept at secretarial as well as chemical work, for Paracelsus wrote an integral part of his great surgical work as well as the two treatises already mentioned. That dedicated to Boner deals with French Smallpox, Paralysis, Boils, Perforations, Agues and the like, and consists of material which was afterwards included in the "Little Surgery."

It was presented to Boner on June 11, with a dedication which begins: "To the most famous Hieronymus Boner, Provost of the town of Colmar, with greeting and all service from Theophrastus."

In the Introduction he praises the wisdom, goodness, and miraculous power of God in the realm of the spirit and the intellect, and above all in medicine, and ends by associating his work with the "honour of God and the service of man."

The other book was given to Konrad Wickram, city-magistrate in Colmar, on July 8. Its dedication exalts the love of our fellow-man, a love which undertakes all work with a single eye to the common good, for which alone the author has desired to work, that he may serve others and spread abroad the knowledge of true medicine.

"Yes, even the polemics in his book are justified by the consideration that he has been constrained to encounter every error, misconception, contradiction, and fallacy both in the practice and theory of medicine, which might be injurious to the public well-being, and that he therefore only withstands those who ply such weapons."

The book was on "Open and Visible Diseases" and has already been noticed.

His patients were astonished at his skill. Even Oporinus admits that "in Alsace he was admired by all as if he had been Esculapius himself." He lingered in Colmar till well on in July, busied with researches on the French Malady and its cure.

It is likely that he had long suspected his secretary of treachery, but had borne with him for the sake of his intelligence, industry, and experience. But when he left Colmar he either dismissed him or Oporinus went away of his own accord, discouraged by the prospect of restless and precarious wanderings. "This archknave that dogs my heels as a gaunt crow a gasping sheep," Browning makes Paracelsus describe him to Festus at Colmar, and the comparison may have some verisimilitude. But they parted in peace and Paracelsus gave Oporinus a portion of his store of laudanum, which he found of great use in an illness shortly afterwards. He went back to his elderly wife

at Basel and lived for forty further years, becoming an excellent printer known for the correctness of his work and the purity of his Greek and Latin. He was four times married and struggled all his days with debt. That Paracelsus often laughed at him and even contrived practical jokes at his expense is probable if not certain. He did the same to " studious Franz," who had more humour than poor Oporinus, and loved his master all the better. On his death-bed Oporinus confessed to Toxites that he had never realised how great a man his master was and that he bitterly rued two things —having lost Hohenheim's books by lending them to other people, and having written a scurrilous letter against him. This letter contains the famous accusation against Hohenheim of over-much drinking and is the only evidence on the subject. It need not be credited and may have been inspired by resentment against Hohenheim's ridicule and exuberant laughter when he was stupid. But unfortunately the slander bore fruit in the works of a Swiss called Lieber, born at Baden in Switzerland in 1524, a man who never saw Paracelsus, but being a convinced scholiast collected all the calumnies and lampoons against the leader of the new scientific school and expressed under the name of " Erastus " the hatred of the class who hated him without cause in four venomous books " Against the New Medicine of Philip

Theophrastus." It is enough to add that Erastus believed in anything that was unpleasant, in witches, black magic, monsters, and the pranks of the devil.

Archbishop Netzhammer repels the calumny with point and propriety :

" In vain may we seek amongst his numerous writings for a single passage in which he celebrates the joys of wine ; on the contrary he points out again and again that he who serves his appetite will find pleasure neither in him nor in his teaching. Theophrastus was no drunkard, but we believe that he despised neither beer nor wine. He says expressly in one of his surgical books : ' Beer is more wholesome than wine, that is to say it produces less sickness than wine.' "

Oporinus was spiteful because of his own lack of understanding, a lack which atrophied all gratitude for the extraordinary advantage he enjoyed as first recipient of conceptions that ushered in a new dawn of science.

How bitterly Paracelsus felt the ingratitude of these men whom he clothed, fed, and paid, and to whom he revealed his far-reaching philosophy not alone in its magnitude, which they could not grasp, but in its details of practice and treatment of healing drug, ointment, plaster and tincture, which they appropriated and boasted as their own discovery, is poignantly revealed in many of his books. In the Intro-

duction to his "Bücher Bertheoneæ," he tells us how few of his students accepted the teaching and counsel which he gave them. He had helped to educate hundreds of doctors, but of them all he could claim only two from Pannonia, three from Poland, two from Saxony, one from Slavonia, one from Bohemia, one from Holland, none from Suabia, although he had a multitude of students in every land. In Switzerland none grew to be doctors, although some of them claimed to be so; they were no better than the Suabians, "a sect of lost physicians."

When he left Colmar it was for that barren field. He went to Esslingen, where the Bombasts von Hohenheim had some relics of their old possessions. One of these was a corner house on the meadow of St. Blaise, and it happened to be empty. Paracelsus made of it a temporary lodging. It had two arched cellars under one side of the doorway, a smaller leading out of the larger and ventilated by a shaft up to the back yard. This cellar was about thirteen feet long and thirteen feet high with a breadth of ten feet. A small niche was in the wall, which his furnace just filled. When the roof was seen in 1882, it was found to be covered with astrological signs and cabalistic characters too blackened to be accurately deciphered, and at the same time there was found on the floor a little double-sided hammer with a handle and a mortar with long iron pestle, both very old.

He fitted up this cellar with the equipments necessary for his laboratory, and worked at both alchemical and astrological experiments and problems. A tradition still living in 1882 records that here he practised dark and mysterious rites by night, and when the proprietor of the house restored it in that year and removed the cellars, he had a life-size portrait of Paracelsus painted on the gable wall to propitiate the ghost of the "old magician." He is represented clad in doublet and furred cap with gold chain and jewel, and the picture is apparently founded upon a woodcut of the portrait now in the Louvre.

In all probability the work done in the "Paracelsus cellar" did partake of the marvellous and may have been his "Prognostications for Europe concerning the years 1530 to 1534," published at Nüremberg at the close of 1529 by Friderich Peypus, who printed it with great care. It had an extensive circulation and was reprinted no fewer than five times during this and the following year.

This is the first time that Paracelsus appears in the rôle of a prophet. His midnight experiments were probably astrological and may have been necromantic, although he condemned necromancy. The title-page of the first edition gives us some ground for this surmise. Dr. Sudhoff tells us that three-fourths of it are occupied by a fine woodcut, in which a warrior appears above, surrounded by clouds, his head

turned downwards, his feet in the clouds, a shield on his right arm, a drawn sword in his left hand, a great double-rayed star on his body. Rays of light fall from his face upon the seven planets below, represented by typical figures which stand on a layer of clouds. These figures are in full sunshine, but at one side rain falls from the clouds round the armed man. Directly under the clouds on which the planet spirits stand are a coffin of glass and a litter; in the coffin lies a crowned man. Reversed torches fill the right and left corners below. A later edition showed a figure of the plague mowing people down with a scythe; a dragon and a lion against which a crowned knight levels his lance; a crowned emperor and a turbaned sultan apparently making peace, and another armoured knight. It ends with the doggerel:

> Who does not die in hunger-need
> Nor falls on field of battle dead,
> Who safely flees the deadly pest
> And from the jaws of savage beast
> Escapes, may well in comfort say
> Now comes there many a happy day.

At Esslingen, attracted by rumours of his occult occupations, a heterogeneous collection of so-called disciples gathered round him whose worthlessness he afterwards so tersely characterised. Some of these hangers-on were his servants, some his secretaries, some his pupils.

His habit of working by night was now confirmed. He slept very little, four hours at most, for his mental vitality so coerced that of his body that we cannot wonder at the premature aging of the latter. Unfortunately he had no wealthy patients at Esslingen to supply payment for his needs and those of his followers. Many of the latter were proved rogues and fell into the hangman's hands, and he was probably pitilessly robbed. The result was practical bankruptcy and he was obliged to give up his house. He took to the roads again, followed by some of his ragged dependents—whom he gradually shook off.

Paracelsus described the time spent at Esslingen as "misery"; but it is believed that he returned once again if not twice. His nature could not lose

> Her first imprint;
> It still must hoard and heap and class all truths,
> With one ulterior purpose: I must *know*!

He had tried settled life, but what dull citizenship could content his thirsting, eager soul, ever longing to discover more of the natural and of the supernatural and finding it neither amongst the bookworms of Basel nor the smug philistines of Suabia?

Apparently he went first to Switzerland, perhaps visited his friends Zwingli and Leo Judæ at Zürich, and reached St. Gallen early in 1529. Here he had three friends, the two

brothers Schobinger and Joachim von Watt, known as Vadianus. His special friend was Bartholomew Schobinger, a man of fine intelligence, keenly interested in science and particularly in chemistry. He invited Paracelsus to stay with him for some time and help him to arrange and furnish a complete chemical laboratory at Castle Horn, in which they worked together. He was known as the "rich philosopher" and was honoured by the Emperor Ferdinand, who granted him the right to bear arms.

We do not know exactly how long Hohenheim stayed at Castle Horn, but it was long enough to include the painting of his portrait for Bartholomew Schobinger. This picture is now in the Historical Section of the Museum at St. Gallen, but before it was placed there it belonged to Mr. August Nief. It is painted in oil on linen canvas and is about twenty-two inches in height and eighteen in breadth. It is not in good condition, but the engraving kept in the Town Library, and taken when the original belonged to Mr. Nief, is clear and good. It shows Paracelsus at the age of thirty-six, when he wore a short dark beard the colour of his hair. His dress is careful. He wears a white shirt finished by a collar of lace, a pale green doublet cut out at the neck to show the collar and damascened florally in dark green: a black mantle hangs from his shoulders in

heavy folds. His right hand, which is partly concealed by these folds, rests on the cross-handle of his sword, his "trusty Azoth," and attached to a cord round his neck is the jewel which disappears under his mantle. The background shows a dark red curtain drawn to one side, and level with this is the inscription "Theophrastus Paracelsus, 1529," in three lines.

Whilst with the Schobingers, he met their famous contemporary and relation, Vadianus, humanist and reformer, through whose efforts the Reformation was accomplished in St. Gallen. This man, whose memory lingers there in the name of street and library, was another of those influential sons of the renascence so important at that time of ferment and transition. Born eleven years before Paracelsus, the son of a wealthy merchant, he was sent to the University of Vienna when he was eighteen years old, just before Dr. Wilhelm von Hohenheim migrated from Einsiedeln to Villach. In Vienna he met Zwingli and came under the influence of the famous German teacher Conrad Celtes, who brought with him to Vienna the fine flower of renascent culture. Joachim von Watt caught its stimulus and became an eager humanist. Virgil was his favourite amongst the classic poets, and the copy which he used, a manuscript on old parchment, can still be seen at the Town Library of St. Gallen, under Professor Dierauer's appreciative care. He made

studies of a great many Greek and Roman works, wrote treatises on poetry and rhetoric, edited books both ancient and contemporary, and made himself acquainted wth the current discoveries of Portugal and Spain in the interests of geography, for which he had a special gift. He spent sixteen years at Vienna and then returned to St. Gallen, perhaps because his parents were aging, perhaps because the Reformation struggles required him. But for some years before his return he had been studying medicine and had even taken his degree.

In this lay the key to his interest in Paracelsus. Such a mind as Vadian's, born with the renascence, attracted by all it had of new and vitalising, cultured by the sons of the renascence, must have lost patience with the meaningless reiterations of ancient science and have gladly turned to the voice of the forerunner who cried in the wilderness "Prepare ye the way of the Truth." Vadian became burgomaster and historian of St. Gallen, his humanism matured into a great humanity, his classicism was transmuted into German patriotism.

When Paracelsus left Switzerland, he made his way slowly northwards through the south and east of Wirtemberg into Franconia. We do not know how he travelled, but his aim was Nüremberg and he reached the famous city, after long loiterings on the way, on November 23,

1529, a date which indicates some months of wayfaring. As he travelled, he was besieged by itinerant students and even by physicians, and halted in many places to examine and teach them, finding amongst them no God-given worth at all, only the usual curiosity, greed, and incapacity.

He carried with him his "Prognostications" and his completed work on the "French Malady." It had been written very carefully.

"There are many indications," says Professor Julius Hartmann, "that he revised his writing over and over again, rejected its first form when on such revision new and better terms suggested themselves, and often modified its more violent epithets."

To this book he had given the greatest care. It was written in three parts, the first of which condemns the medicines then employed, because they aggravated rather than allayed the disease. The second points out the true treatment and medicines and explains how and for what purpose these are to be used. The third deals with the disease itself and points out how other new and unheard-of maladies result from mistaken and false methods of medical treatment.

In Nüremberg no book could be published without passing the Censor. The reason for this lay in the number of lampoons and slanderous fly-sheets that had been exchanged by

the Catholic and Protestant contending parties. Government had decreed the establishment of a Censor's Court in 1523, so that no publication could take effect until the manuscript had been examined and authorised. Paracelsus submitted his writings to the Court and received permission to print them. Along with the "Prognostications" he entrusted his book to Friderich Peypus, who brought it out in quarto form, consisting of fifty-four sheets and a title-page decorated with a border of small woodcuts with the shield and initials of the printer. It bore the title: "By the most learned Master Theophrastus von Hohenheim, concerning the French Malady. Three Books."

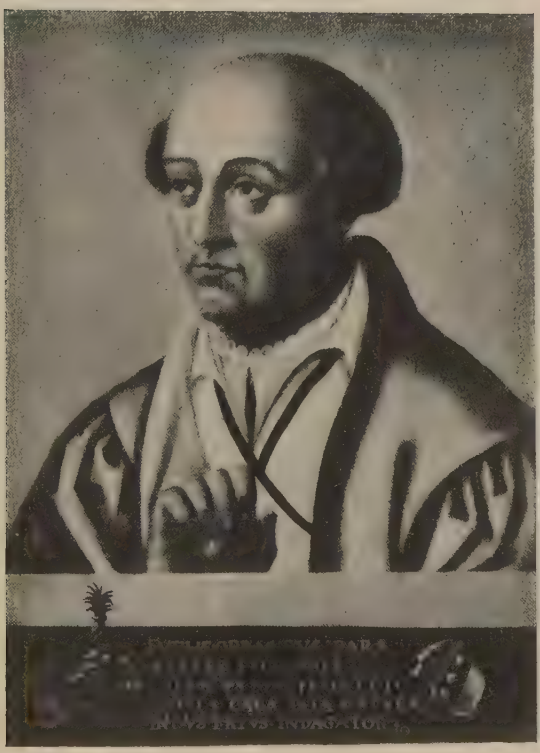
He dedicated this, and another treatise on the contagious character of the French Malady, to the Censor, "The Honourable and Estimable Master Lazaro Spengler," in gratitude for his prompt permission to publish it. He left the city while it was being printed and lived quietly at Beratzhausen, a village near Ratisbon, on a small tributary of the Danube. Here, in peace, he busied himself with new writings, hoping that they would be speedily printed at Nüremberg and given to the world. But this hope was shattered. An order came from the city that no more of his books were to be published there. It proved to be another vengeful stroke from "Galen in Hell."

The Medical Faculty in Leipzig had read his

book and had taken umbrage at his insistence on the ignorance and mischievous blundering of their class. So with all ceremony they addressed themselves to the Council of Nüremberg and requested that no further writings by Theophrastus von Hohenheim should be printed there. They did not like being called "impostors," a title which Paracelsus freely bestowed on all doctors of the old school in the first section of his book. Probably they felt he was right. We find amongst his surgical works a copy of an indignant letter written but not sent to the magistrates of Nüremberg, very ceremonious as to their titles, but with unmodified contempt for their action:

"It is not your business to judge or forbid without careful consideration and discussion: as a matter of fact you are not able to judge of my work, you have not intelligence enough. If the University has any reason to complain of me, let it appoint a Disputation, not forbid public publication. Until I am vanquished in a Disputation such a prohibition is repression of the truth. Printing is for the bringing of truth to light. My writing concerns neither Government, princes, lords, nor magistrates, but occupies itself with the deceptions of medicine so that all men, rich and poor, may be set free from abomination."

The letter which he sent was more guarded and more courteous. He spoke—



PARACELSUS.

After the original painted in Nuremberg in 1529 or 1530, now in the Royal Gallery at Schleissheim, near Munich.

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" of his great desire to write what would really benefit the sick, who were so grievously maltreated and allowed to perish. He trusted that a city like Nüremberg, which was celebrated for its action in protecting the truth, would also protect the men who made the truth known, and would grant them room and refuge. Let those who doubted the truth of his statements meet him in an open Disputation, which, as formerly so now, he would willingly attend."

This letter, written on March 1, 1530, was sent to the magistrates, but received no acknowledgment. It is little wonder that in after writings he relieves his feelings in an occasional sarcasm against the city of shattered hopes and lost illusions. " They have forsworn physicians —and God mercifully allows them four—all fools and even horrors."

Plain words these, and unpleasant, perhaps not altogether deserved, for it is evident that the worthy officials were frightened to maintain their first opinion in face of the authoritative verdict of Basel and Leipzig. Hohenheim had the volcanic temperament needed to destroy the old order, which he knew to be corrupting the world, as he had the piercing insight which discerned the spirit of the new order amidst a welter of troubled and heaving stagnation. But the stagnant had to be laid bare in all its mischievousness, to be revealed for what it had become. The very men who had recognised

the degeneracy of the Church were slow to admit its parallel in the realm of knowledge. Only here and there had the reformer of science a sympathetic listener, and that amongst the few who, able to master the literature of medicine in its earliest form, had realised how far its teaching had strayed from its first points of departure and direction.

In his childhood he had acquired the simplicity of speech still observable amongst the Swiss and a certain homeliness of expression, simile, and illustration which never left him. He had a message to give which needed directness, a réveille to a new day, a new discipline, a new point of departure, and he shouted his message abroad in language that all could understand, and he shouted abroad as well his titanic wrath at those who, hearing, closed their ears and sought to stifle his appeal. There was no time for mincing courtesies; the world needed a new birth and had first to pass through the scathing fire of truth, the old earth and the old heaven had to be shrivelled up as a roll, and a new earth and heaven had to be discerned in their stead. Paracelsus set his torch to the waste-heap and scared its blind and dingy guardians, who denounced him for sacrilege.

CHAPTER IX

"VOLUMEN PARAMIRUM"

I never fashioned out a fancied good
Distinct from man's; a service to be done;
. . . a strength denied
That might avail him.

PARACELSUS stayed at Beratzhausen for seven or eight months and worked there in the peace and beauty of the Laber valley. Although injured and wounded, his sensitive mind and spirit maintained their courage, their self-respect and their dignity. What memory have they left who hurled insult after insult at this their greatest contemporary? They are gone like the "snows of yester-year," and even if the name of one or another survive it is because he insulted Paracelsus and, like a hero of the "Dunciad," his fame is his infamy.

Hohenheim was engaged on the first book of the "Paramirum" and progressed steadily. Dr. Strunz tells us that the "Paragranum" was also written at Beratzhausen, and it is apparent that its Introduction was the fruit of a very fresh recollection of his experiences and persecution at Basel. It is even possible that it

found expression at Colmar or Esslingen, and that he kept it till it was required for the "Book Paragranum," which more than any other of his writings presents in complete form and condensed explanation his whole system of theory and practice. But at Beratzhausen he seems to have been absorbed with the "Volumen Medicinæ Paramirum Theophrasti." It was divided into two parts, together constituting "Paramirum Primum," and to these were gradually added two further parts, which form the "Opus Paramirum," or "Paramirum Secundum," and three books known as third, fourth, and fifth books of the "Paramirum." We may credit Beratzhausen as being the birthplace of the "Volumen" and part of the "Opus Paramirum."

In them he prosecuted the work to which he had now dedicated himself—to make known by writing his new system of research and healing, which included diagnosis, treatment, medicine, and the use of powers which are now admitted into rational practice safeguarded by responsibility. If men would not *listen* to him, they should in time read him and learn of him, not for the sake of polemical insistence, but for that great purpose to which he was dedicated, the good of those who needed healing and were at the mercy of "doctors who are no better than executioners." The prohibition to print in Nüremberg was a discouragement of the most serious character,

and yet it could not check his energy. If not in Nüremberg then doubtless elsewhere, perhaps in St. Gallen, or in Zürich, and if not immediately then assuredly in the future. And after all it was Basel which rejected him that first printed his "Opus Paramirum," that first "came into his philosophy."

During spring and summer he practised his profession and was often sent for to attend rich patients. The poor he sought out himself. His skill was everywhere admitted, his medicines worked marvels of healing, and his personal influence helped his power.

But another sordid tale of maltreatment and dishonesty has to be told, which recalls the sick-room of Prince Philip of Baden and the thievish miserliness of Canon Liechtenfels. A certain Bastian Castner who lived at Amberg, some thirty miles from Beratzhausen, was suffering acute pain in the leg and had vainly consulted many physicians. He was advised to try Paracelsus, and sent for him, promising to pay the hire of a horse for the journey and to give him food and drink as well as his fee. At first Hohenheim refused to go so far, but he was over-persuaded and rode to Amberg, where, on demanding the money for his horse, he met with a blunt refusal. He decided to leave at once, but was induced by more promises to see the patient and undertake his cure. He was given a room and meals of the scantiest charac-

ter at Castner's house. He soon discovered the cause of disease and was proceeding successfully with its treatment, when his patient's brother, or brother-in-law, a Dr. Burtzli, broke into his room, stole his medicines, and then dismissed him, to carry out the cure himself. All this Hohenheim has told us in the preface to a treatise "Concerning Mercury," which is dated "from my desert at Amberg, at my lodging, 12 July 1530." He counsels all doctors to guard against those patients who invite them to take food and drink in their houses. It was his too common experience to receive such treatment from the rich, although he gave them his many-sided knowledge, his practised help, and his costly medicines. From the poor he neither exacted nor desired professional reward, from the rich he claimed it. He expressed his views upon this point in the Introduction to his three books of the "Bertheonæ" "Concerning Wounds and Sores," first published in 1563 by Adam von Bodenstein. He considers the doctor's fee to be due when the treatment is completed. But this fee is not mere ploughman's, shearer's, or shepherd's wages: the doctor brings help to the sick man, so he deserves more than straw or wool; but if the fee due to him be withheld let him make no loud outcry for it, but rather in obedience to God let him render help to the evil man three times over.

It seems certain that he returned to Beratz-

hausen for a short time and then set out again on his travels. We do not know their first stages, but in the late autumn of 1530 he was at Esslingen for the second time, and by March, 1531, at St. Gallen, where he had his headquarters during the rest of that year. In Esslingen he experienced once more a rich patient's ingratitude.

Perhaps the "Prognostications," which occupied his mind and pen in the latter part of 1530, led him back to his cellar in Esslingen, since they are of an astrological character. They seem to point to the crisis rapidly developing between Catholicism and Protestantism.

At St. Gallen, and indeed throughout Switzerland, this tension had reached its climax. A reformer called Kaiser had been burned as a heretic at Schwyz, and this excited the reformed party to such a degree that Zwingli counselled armed coercion of the Forest Cantons. When Paracelsus arrived at St. Gallen, he found himself in the midst of religious strife, his friends the Schobingers and Joachim von Watt taking part with the reformers. Indeed, it was due to Vadian that St. Gallen became a Protestant canton.

We are told that Hohenheim lived all summer and autumn in the house of the burgomaster Christian Studer, who was in bad health and had put himself under the new treatment. Studer was Bartholomew Schobinger's father-

in-law, and we learn from Schobinger that Paracelsus resided six months with Studer. But besides the care of his host, he attended the poor of the town without fee or reward. He threw himself into the religious fray and helped to spread the knowledge and its message in St. Gallen. It was the evangelical not the political and ecclesiastical side of the Reformation which he espoused and which he ardently proclaimed. No Protestant of them all knew his Bible better, for he had studied it from the years which he spent with Trithemius and cited it again and again as the revealed will of God. He was both doctor and evangelist at St. Gallen in the summer and autumn of 1531. He worked hard at his books too, continued the "Opus Paramirum" and dedicated its two parts as well as the third book to Dr. Joachim von Watt.

An incident of that year was the appearance of a comet, perhaps Halley's. This was seen about the middle of August, and Paracelsus observed it from the Hochberg of St. Gallen. He sent a written account of it to Leo Judæ at Zürich. Leo, who had just finished his translation of the Bible, put it at once into the hands of a printer at Zürich, and one of the two surviving copies is to be found at the City Library there. It is entitled "Interpretation of the Comet which appeared in the mountains in the middle of August, 1531. By the most

THE TOWN GATEWAY IN ST. GALLEN, BUILT IN 1485, AND PULLED DOWN IN 1865.

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learned master, Paracelsus." The title-page shows a rough woodcut of a comet. The dedication runs: "Theophrastus to Master Leo, preacher in Zürich, his greeting. Given on the Saturday after St. Bartholomew's." This fixes the date as August 26, for St. Bartholomew's day fell that year on a Thursday. In this booklet Paracelsus foretells from his observation of the comet trouble, bloodshed, and more particularly the death of illustrious men. His forecast was speedily fulfilled.

The Protestant cantons blockaded those of the Forest, Uri, Schwyz, and Unterwalden, and these assembled eight thousand men and marched to the confines of Zürich between Zug and Cappel. Here, on October 9, a battle was fought in which the Protestant force was defeated. Zwingli had gone with the soldiers to minister to them, and while kneeling beside a wounded man a stone hurled him to the ground and he was then pierced with a lance. He died where he fell, his body was quartered by his foes and burnt, its ashes scattered to the four winds. The Benedictine from Einsiedeln, who had joined him in Zürich when he began the Reformation there, was also killed, although he too was there to minister and was unarmed. They died for the religious liberty of Switzerland, for the freedom to preach in all its cantons, but they were rash in bringing it to the test of the sword. Next month Œcolampadius died at Basel.

Johannes Kessler, who chronicled the Reformation in St. Gallen, mentions Paracelsus in his book "Sabbata." A friend of Kessler's called Johann Rütiner kept a diary, written in choice dog-Latin, from 1529 to 1538, and did not disdain to include gossip in its pages. To him we owe one of Hohenheim's experiences while there. He was regarded as a miracle-worker and it was believed that he could heal by a wave of his hand. He was asked to exercise this power on a boy called Caspar Tischmacher, whose hand had been seriously injured. Paracelsus operated upon it and took out a small bone. This caused considerable swelling and was not at all what the incensed father had expected, and he summoned Paracelsus before the magistrates and the surgeons of the city. Naturally Hohenheim paid no heed to this absurd summons, so Tischmacher cited him to appear before the High Senate, whose court granted fourteen days in which to consummate the boy's recovery. But although progressing favourably the hand was not quite in order when the fortnight expired, and the father flew again to the magistrates, who refused to listen to him, and then to the people's tribune, a man called Müller. Paracelsus had carefully tended his patient and knew that the hand was now within three days of complete recovery, so, humouring the father's superstition, he said with great solemnity: "Bind living earth-

worms upon the hand for one night, and lo! in three days it will be well."

Rütiner evidently believed in the earthworms, for he adds that Paracelsus knew everything because he had travelled all over Europe and had been a gipsy for five years!

Hohenheim left St. Gallen about the end of 1531, and wandered for many years. Their best record has been given by Dr. Julius Hartmann in his "Theophrast von Hohenheim." Dr. Hartmann has drawn from Hohenheim's own writings and arranged in the order of their happening the references to his life and travels which he was wont to make in explanation or illustration of his subject. When we reflect that these writings are most voluminous, that they are in old German, something infected by old Swiss, that they are not in the first place autobiographical and are therefore not chronological, we are enabled to form some estimate of the debt to Dr. Hartmann incurred by all Paracelsian students. He has supplemented this labour with minute research into all disputed or obscure points, and his book ranks with those of Dr. Sudhoff as indispensable to all less scholarly and less scientific biographers of Theophrastus von Hohenheim.

The five books of the "Paramirum" were completed at St. Gallen. The first edition of part of these, the "Opus," appeared in 1562, twenty-one years after Hohenheim's death. It

was edited by Adam von Bodenstein. The second edition, which comprised all the books, appeared in 1575, edited by Toxites and printed at Strassburg by Christian Müller. A third edition belongs to Huser's collection of Hohenheim's writings and is a quarto volume of 426 pages, with a portrait of Paracelsus, somewhat roughly carried out, a half-length, the face turned slightly to the right, the coat open at the neck and showing shirt and frill, a ribbon round his neck from which his jewel hangs, his right hand holding the round knob of his sword-handle, while the left grasps its cross-bar. The year given is 1540, so that it represents him nine years after he left St. Gallen. There is a great difference between this and the oil painting of 1529, when his hair was still dark and he wore a beard. In the woodcut he is very bald with side-locks of grey hair. His face is thin, the features are more prominent, the melancholy eyes more sunken. Above the portrait is his favourite motto: "*Alterius non sit qui suus esse potest,*" and beneath are the words: "Effigies Philippi Theophrasti ab Hohenheim: suæ ætatis 47. *Omne donum perfectum a Deo imperfectum a diabolo.*"

This portrait is introduced by Huser into each of the ten parts of Hohenheim's "Books and Writings." It was taken from an engraving by Augustin Hirschvogel, whose monogram AH is within the date 1540 below the last motto.

It has been reproduced again and again, often altered and provided with other mottoes, but its variants can be traced back to Hirschvogel's engraving.

Dr. Carl Aberle speaks of this particular wood-cut as anonymous, copied from Hirschvogel's engraving, but with only one of its four columns. Hirschvogel painted a portrait of Paracelsus in 1538, from which he made his engraving two years later, and the wood-cut used by Huser is a coarse copy of the engraving.

The five books of the "Paramirum" occupy 327 quarto pages in Huser's edition, which was published by Peter Perna at Basel in 1589. Huser tells that us he searched through Upper and Lower Germany, partly in person, partly through other people, for the original manuscripts of Hohenheim's writings and collected a great number, some of which were already in print, others not yet published. Many of them had been destroyed by ignorant people. Huser gives a list of the scholars and doctors who helped him, and this list indicates a great reaction in favour of Hohenheim's teaching forty years after his death. Other editions either complete or partial belong to 1603, 1605, and 1616–18, the earlier in Latin, published at Frankfort and republished at Geneva in 1658. The "Opus" was frequently republished at Frankfort, Basel, and Cologne in the sixteenth and seventeenth centuries.

Dr. Franz Strunz has recently given us a new edition of the "Paramirum" with helpful notes, published by Eugen Diederichs at Jena in 1904. This is based on Huser's, but has been compared with the earlier edition of Adam von Bodenstein and is a literal reproduction of the original text, except for full printing of the abbreviations and occasional modernisation of obsolete phrases. In considering the "Paramirum," one of Hohenheim's most important works, I have availed myself of Dr Strunz's edition.

In his preface the editor says :

"Paracelsus does not let himself be translated; that would destroy the unique and ancient *timbre* of his utterances. The original style, unless it is an obstacle to legibility or obscures the sense, has been left as much as possible unchanged, and this has made it difficult to arrange an accurately consistent spelling."

After giving a list of the numerous editions Dr. Strunz introduces the work with these words :

"The 'Paramirum' writings constitute one of the most celebrated and most characteristic of Hohenheim's books. If the 'Book Paragranum,' strongly polemical, is a statement of the new physical science and medicine, the 'Volumen' and 'Opus Paramirum' offer us almost everything of importance concerning re-

search, medicine, and philosophy with which his mind was continually occupied. These thoughts are here expressed in words, some of them in full detail, some briefly indicated, some again in a comprehensive sketch which we find fully worked out in other writings. The two ' Paramirum ' books contain the most important constituents of Hohenheim's system. . . . They exhibit lucidly his own method as student of nature, doctor, and philosopher, although his theological side remains somewhat in the background. All comes here to the surface: his natural philosophy concerning the macrocosm and the microcosm, born of the renascence spirit, his solemn sense of the unity and universality of God, the world and the soul, his lofty self-consciousness, his eager interest in men and the new individual life, his joy in the light of nature, his critical use of experiences and very specially his systematic and comparative research by experiment."

The " Volumen Paramirum " deals with five subjects: diseases ascribed to the action and influence of the stars; diseases which arise from poison or foulness in meat and drink, an origin which he calls *tartarus*; diseases arising from nature, some from the stellar microcosms, some from the foul elements, some from the natural humours, of which there are many hundred kinds (a palpable hit at Galen's four humours); diseases which are set in action by the spirits of men, those especially

of evil disposition, and which are partly magical diseases; and diseases to which men must submit through the secret purpose of God.

In the two books of the "Opus Paramirum," the origins of diseases are treated in a more positive manner, as derived from the corruption of the quicksilver, salt, and sulphur in the microcosm. The third book treats in detail of diseases due to tartaric acid coming through food and drink; the fourth is specially occupied with the special function and diseases of women; and the fifth, in five subdivisions, handles those diseases which are supernatural and come about by the misuse of the imagination, by the powers occult in dead bodies and relics, and by the powers of signs and words, which if they cure at all do so by the power of the devil. There is a prologue to each section.

In order to indicate his matured theories and their expression in this book, one to which he devoted immense care, some quotations from the text must meagrely suffice. The difficulty of selection is great. Until Hohenheim's works receive in England the scholarly interest and appreciation which they have secured for the last thirty years in Germany and Austria, the exact position which this great man held in the development of exact research cannot be rightly recognised and our acquaintance with the history of medicine must remain inadequate.

Part I of the "Volumen Paramirum" explains in eleven short chapters what Paracelsus calls the *Ens Astrale*. From the first to the fourth of these he contests the prevailing belief that the stars affect men from their birth to their death.

"The stars," he says in the fourth chapter, "control nothing in us, suggest nothing, incline to nothing, own nothing; they are free from us and we are free from them. But note that without the heavenly bodies we cannot live: for cold, warmth, and the consummation of what we eat and drink comes from them: but the human being does not. They are so far useful to us and so far do we need them as we need warmth and cold, food and drink and air: but further they are not in us nor we in them. Thus has the Creator designed. Who knows what there is in the firmament which can serve us? For neither the clarity of the Sun, nor the arts of Mercury, nor the beauty of Venus helps us; but the sunshine helps us, for it makes the summer when the fruit ripens and those things that nourish us grow. But observe; if a child, which has been born under the luckiest planets and stars, and under those richest in good gifts, has in its own character those qualities that run counter to those gifts, whose blame is it? It is the fault of the blood, which comes by generation. Not the stars, but the blood brings that about."

We may almost conjecture that his astro-

logical experiments in Esslingen had convinced him of the futility of horoscopes.

In the fifth chapter he continues his reasoning:

"One man excels another in knowledge, in wealth or in power. And you ascribe it to the stars; but that we must banish from our minds: good fortune comes from ability, and ability comes from the spirit. Every man has a special spirit according to the character of which he has a special talent, and if he exercises that talent he has good fortune. Understand that this spirit is the *Archeus* and we will not treat of it further lest we wander from our point. You say also concerning the varying stature of men that so long a time has passed since Adam that amongst so many men it is impossible that one should resemble another, with the exception of twins, and that this is a great miracle. And you attribute this to the heavenly bodies and to their mysterious powers. You should know that God has decreed a special feminine entity and that till all types, colours, forms of mankind are fulfilled, and these are innumerable, people will be born who will be as the dead have been. When the last day comes, then will all the types and fashions of men be fulfilled: for only then will the point be reached when all colours, forms, types, and fashions of men are at an end and no new fashion can be created. Nor imagine that you can make the world older, or any part of it. For when all the forms and fashions of mankind have been

fulfilled and no new type can be called into being, the age of the world is at an end."

In the next chapter he continues:

"You say, and rightly, that if there were no air, all things would perish. But the air is held in the firmament and if it were not in the firmament the firmament would melt away, and that we call the *Meteoron*. And observe well that this *Meteoron* contains all created things in heaven and earth and all the elements live in it and by it. . . . To explain what this *Meteoron* is, note first an illustration. A room shut up and locked has an odour which is not its own, but which comes from whomsoever has been inside. Therefore, whoever goes inside must be sensible of the odour, which is not generated by the air but comes from him who has been in the room. Now understand that we speak of the air in order that we may explain the *Ens Astrale*. You allege that the air comes from the movement of the firmament: that we do not stand still, but that the wind proves itself to be meteoric. The air comes from the Most High and was before all created things, the first of all: after which the others were created. The firmament exists by the air as well as all other created things: therefore the air does not come from the firmament. For the firmament is maintained by the air, as man is; and if the firmament stood still, there would still be the air. If the world were to dissolve when the firmament stood still, it would be because the firmament had no air and because

the air had melted away, and then all mankind and all the elements must pass away, for all are maintained by the air: that is *Meteoron magnum*. This air may become poisoned and changed and men breathe it in, and since man's life dwells in it, so must his body, which seizes on what is in *Meteoron magnum* and taints itself therewith. Just like the air in the room, there is something which taints the *Meteoron*, remains in it and proceeds from it."

In the eighth chapter Paracelsus develops from the foregoing his theory of the maladies which are due to the heavenly bodies.

"The stars," he says, "have their own nature and properties just as men have upon the earth. They change within themselves: are sometimes better, sometimes worse, sometimes sweeter, sometimes sourer, and so on. When they are good in themselves no evil comes from them; but infection proceeds from them when they are evil. Now observe that the stars surround the whole world just as its shell does an egg: the air comes through the shell and goes straight to the earth. Then observe that those stars which are poisonous taint the air with their poison, so that where the poisoned air comes, at that place maladies break out according to the property of the star: the whole air of the world is not poisoned, only a part of it according to the property of the star. It is the same with the beneficent properties of the stars: that too is *Ens Astrale*: the vapour,

exhalation, exudation of the stars mingle with the air. For thence come cold, warmth, drought, moisture, and such like according to their properties. Observe that the stars themselves do not act: they only infect through their exhalations that part of the *Meteoron* by which we are poisoned and enfeebled. And in this manner the *Ens Astrale* alters our body for good or evil. A man whose blood is hostile to such exhalations becomes ill; but one whose nature is not hostile is not hurt. He too who is finely fortified against such evils suffers nothing, because he overcomes the poison by the vitality of his blood, or by medicine which combats the evil vapours from above. Observe then that all created things are opposed to men, and men are opposed to them: all may hurt men and yet men can do nothing to them."

In the ninth chapter he explains this theory more fully:

"A fish-pond which has its right *Meteoron* is full of fish; but if the cold becomes too great it freezes and the fish die, because the *Meteoron* is opposed to the nature of water. But this cold comes not from the *Meteoron*, but from the heavenly bodies whose property it is. The heat of the sun makes the water too warm and the fish die on this account also. Certain heavenly bodies effect these two things and others make the *Meteoron* acid, bitter, sweet, sharp, arsenical and so on, a hundred various flavours. Every great change in the *Meteoron*

changes the body, and so note how the stars contaminate the *Meteoron*, so that we fall ill and die of natural exhalations. No doctor need wonder at this, for there is as much poison in the stars as on the earth. And he must remember that there is no disease without a poison. For poison is the beginning of every disease and through the poison all diseases, whether in the body or occasioned by wound, become disclosed. You will discover if you recognise this, that more than fifty diseases, and fifty more besides not one of which is like another, are all due to arsenic: still more are due to salt, still more to mercury, still more to red arsenic and sulphur. We point this out to you to make you realise that you may seek in vain for the special cause of one particular illness, so long as one substance gives rise to so many: find out the substance and you will then find out the special cause. And hold fast the rule that you must know the substance which has caused the malady rather than the apparent cause, as practice will prove."

In the tenth and eleventh chapters Paracelsus continues to develop his theory of the *Entia Astralia* and their influences on the earth and on water and especially on men, and concludes:

"Observe that some of the *Entia Astralia* poison the blood only—such is red arsenic; some hurt only the head, as mercurial poisons; some only the bones and blood vessels, as salts; some are of such a nature that they produce

dropsy and tumours, as orpiment or flowers of arsenic; some produce fevers, as the bitter poisons. That you may fully understand this we will show you how maladies are divided. Observe that those *Entia* which go *into* the body and there encounter the *Liquorem Vitæ* produce maladies *in* the body: others produce sores and wounds and are those which encounter *Virtutem Expulsivam*. All theory is contained in these two."

The second part of the "Volumen" deals with the more obvious origins of diseases, and particularly with the dangers from food and drink. He brings forward his famous simile of the alchemist placed by God in each of His creatures, whose business it is to separate the evil from the good in their nourishment.

"That alchemist is clever at his business, and just as a prince knows how to employ the best qualities of his servant and to leave alone the others, so the alchemist uses the good qualities of our food for our nourishment and expels those things that would harm us. The ox eats grass, man eats the ox. Every creature has its own food. The peacock eats snakes and lizards, animals complete in themselves, but not good for food except to the peacock. So each man needs his own food and his alchemist to separate the evil from the good. A pig will eat what men throw away and that proves that the alchemist in the pig needs to be far more careful than he needs to be in men.

The alchemist takes the good and changes it into a tincture which he sends through the body to nourish the flesh and all that is in the body. This alchemist dwells in the stomach, where he works and cooks. The man eats a piece of flesh in which is both bad and good. When the flesh reaches the stomach there is the alchemist who divides it. What does not belong to health he casts away to its own place, but sends the good wherever it is needed. This is the Creator's decree: thus is the body maintained that nothing poisonous shall affect it.

"But there is an *Essentia* and a *Venenum* in everything needed by man: the *Essentia* supports him, the *Venenum* is the origin of many illnesses. For sometimes the alchemist does his work imperfectly and does not divide the bad from the good thoroughly and so decay arises in the mixed good and bad and there is indigestion. All maladies from the *Ens Veneni* arise from defective digestion, and this proves that the alchemist is not doing his work thoroughly. Therefore decay ensues, and that is the mother of all such maladies, for it poisons the body. Pure water can be tinged to any colour and the body is like that water and takes the colour of decay, and there is no colour of decay which has not its origin in poison. There is either local decay or decay of the organs of expulsion. For decay hurts what is good and generates disease. Each poison has its own way out of the body: sulphur through the nose, arsenic through the ears, and every other poison is expelled through its own organ.

And if they are not expelled then they become the source of diseases. But the instruments of the alchemist may become diseased without his being able to hinder the change, through the air and through the mouth, for the air is full of poison, and this poison may enter the body and bring about disease, destroying the members and the instruments with which the alchemist works so that he is powerless."

The fifth part of the "Volumen Paramirum," *De Ente Dei*, consists of eight chapters especially addressed to those who believe in God and who realise that all maladies come from God, that though some originate in the conditions of nature, God is the Creator of nature and that He Himself sends certain maladies in chastisement.

"God gives health and sickness and He gives the medicine to heal our sickness. No doctor knows the end of our sickness, for God holds that in His hand. For every sickness is purgatorial, therefore no doctor can heal: it is essential that God should end the chastisement and that the doctor should be one who works in the consciousness of predestined purgatorial chastisement."

He points out that God sends the doctor, who is powerless without Him, and he appeals to doctors to be Christians and like to Christ.

"God will do nothing without men. If He

works a miracle, He does it through men: this He does through the doctor. But since there are two kinds of doctors, those who heal miraculously and those who heal through medicine, understand before all things that he who believes works miracles. But because faith is not strong in all, and yet the hour of chastisement comes to an end, the physician accomplishes that which God would have done miraculously had there been faith in the sick man."

Paracelsus concludes the "Volumen Paramirum" with an earnest injunction to physicians to choose the true art of medicine and not fantasy:

"For the true art is reason, wisdom, and sense, and sets in order the truth which experience has won; but those who hold to fantasy have no ground to go upon: only formulas that are past and done with, as you know well enough."

CHAPTER X

"OPUS PARAMIRUM"

'Tis in the advance of individual minds
That the slow crowd should ground their expectation
Eventually to follow.

THE "Opus Paramirum" consists of two books, which treat of the three primary substances, salt, sulphur, and mercury, as origin and cause of disease. *Liber Primus* has eight chapters, and is prefaced by an appeal to Dr. Joachim von Watt to forsake the errors of the scholastic school of medicine and as a lover of truth to adhere to the truth.

"That I may behold such a decision in thee," says Paracelsus, "and may not spend my time in St. Gallen in vain, I am constrained to arouse thy interest in all knowledge of nature and creation to accurate discernment, that we may both be remembered amongst the many who are in medicine. For since thou art a supporter of medicine and that by no means the least, thou wilt discover in accepting the truth and in furthering it many things which concern the eternal: nor wilt thou the less become a promoter of truth in matters concerning the body wherein the eternal dwells."

Both books develop Hohenheim's theory of the "Three Principles," a theory which he carried into the intellectual and spiritual as well as into every part of the material world of nature and of man, of the macrocosm and the microcosm.

"These three," he writes, "form man and are man and he is them, receiving from them and in them all that is good and all that is evil for the physical body. So that the physician must know these three and must understand their combinations, their maintenance, and their analysis. For in these three lie all health and all sickness, whether whole or partial. In them therefore will be discovered the measure of health and the measure of disease: for the physician must not overlook the weight, number, and measure of disease. For according to these he can estimate the source whence it derives, and it is of great importance to understand this well before going further. Death also is due to these three, because if life be withdrawn from the primary substances in whose union life and man exist, man must die.

"From these primary substances therefore proceed all cause, origin, and knowledge of disease, their symptoms, development, and specific properties and all that is essential for a doctor to know. . . . God has so fashioned medicine that it is not consumed by fire: He has also so fashioned the physician that he is born from fire. For the physician is made

by medicine and not by himself; therefore must he study all nature, and nature is the world with all that it contains. And what nature teaches him that must he seek to understand. But let him seek nothing in his own knowledge, but in nature's light let him discover the teaching locked up in her storehouse. When the doctor finds nature open and unconcealed before him, then will the origin of health and sickness be unobscured. For since he is a doctor by and from medicine and not without medicine, and since medicine is older than he, he is out of medicine and not medicine out of him. Let him search and learn from what has made him and not from himself."

Paracelsus points out that the finest mind comes into the world empty. It may be supremely fitted to hold the treasures of learning, just as a well-made casket is fitted to hold the treasure which a man may win to fill it. So the *præclarium ingenium* is empty as the casket until the man who desires to be a physician fills it with the fruits of his research, with his skill and with medical knowledge. What he has acquired and experienced he keeps therein and makes use of when it is required. He illustrates this from the crafts of glass-making, carpentering, and house-building.

"The fine intelligence is the casket of medicine, but the treasure to be held in it comes out of the fire of experience, as does glass out of

the fire in which it is made. The test of the doctor is that he has learnt his knowledge and skill in the fire of experience."

He gives to experience, or experiment, the symbolic name of Vulcan, no god, but a workman, who brings what God has fashioned into its completion. Experimental science is the workshop of Vulcan, the forge at whose fire all such perfecting takes place.

"There are two kinds of knowledge," he says, "that of experience and that of our own cleverness. The knowledge of experience is twofold: one kind is the foundation and teacher of the physician; the other is his misleading and error. He receives the first from the fire when he plies Vulcan's tools in transmuting, forging, reducing, solving, perfecting with all the processing pertaining to such work. And it is by such experimenting that the three substances are discovered, all that is contained in nature, their kind, character, and properties. The other kind of knowledge is but lumber without experiment: it may once prove right but not invariably, and it does not do to build upon such a foundation. Error is built upon it, error glossed over with sophistries. . . . For we cannot be taught medicine by hearsay or by reading, but by learning. Nature in the fire of experiment shall be our teacher. . . . We can no longer believe in the four humours existing in men, although it is a matter of faith: medicine does not belong to faith, but to sight.

The sickness and health of the soul belong to faith : all the conditions of the body are visible. It is because of these errors and this false faith that not every one who calls Lord ! Lord ! is heard."

In the chapters which follow, Paracelsus explains the three primary substances and the diseases arising from each with frequent reference to Galen's theory of the Four Humours, whose fallacy he exposes as one kept in no casket of true medicine, but proceeding from an earthly and unauthentic source. Out of his own theory he develops the homœopathic system of *like to like*.

" What is the taste other than a need in the anatomy to which nothing is important except to reach its own like ? It follows that as this *gustus* is distributed to every member in the body, each desires its own like, the sweet desires the sweet, the bitter desires the bitter, each in its degree and measure, as those held by the plants sweet, sour, and bitter. Shall the liver seek medicine in manna, honey, sugar, or in the polypody fern ? No, for like seeks its like. Nor in the order of anatomy shall cold be a cure for heat, or heat for cold. It would be a wild disorder did we seek our cure in contraries. A child asks his father for bread and he does not give him a snake. God has created us and He gives us what we ask, not snakes ; so it would be bad doctoring to give bitters where sugar is required. The gall must

have what it asks, and the heart too, and the liver. It is a fundamental pillar upon which the physician should rest to give to each part of the anatomy the special thing that accords with it. For the bread which the child eats has an anatomy similar to his own, and the child eats as it were his own body: therefore each sickness in the anatomy must have its own accordant medicine. He who does not understand the anatomy finds it difficult to act if he be honest and simple; but it is worse with those whose honour is small and whom shame and crime do not trouble. They are the foes of the light of nature. . . . What blind man asks bread from God and receives poison? If thou art experienced and grounded in anatomy thou wilt not give a stone for bread. For know that thou art the father rather than the doctor of thy patients: therefore feed them as a father does his child, and as a father must support his child according to his need and must give him the food which becomes himself, so must the doctor care for his patients."

Hohenheim ends the fifth chapter with an invective against the potions and drugs in common use and gives the warrant of Christ's own word for the employment of oil and wine in wounds.

"Christ who is the Truth has given us no false remedy but one that is compatible and arcane. For far be it from us to say that Christ knew not the *simplicia* of nature. Therefore

oil and wine must be competent, else there is no foundation in medicine. . . . Let it be manifest to you that a grain of wheat yields no fruit unless it be cast into the ground and die there: thus the wound is the earth and the oil and wine the grain."

The word "anatomy" meant to Paracelsus something which differed from its modern application. There were anatomists in his time: he had seen them at Montpellier, Paris, Salerno, and in Germany, students of the dead bodies of criminals who had been hanged, but he thought little of their work and its results. To him only the living body revealed the living processes, the dead body was too rapidly transmuted to give authentic facts. But not until Paracelsus was dead did the term "anatomy" receive its modern value, dating from the discoveries of Andreas Vesalius, who boldly dissected the human body, about 1545. Hohenheim gives his own appraisal of anatomy in the sixth chapter of the "Opus Paramirum."

"There are three anatomies which should be made in man: first *Localis*, which tells us form, proportions, substance of a man and all that pertains to him; the second shows the living sulphur, the flowing mercury, the sharp salt in each member; and the third instructs us how a new anatomy, that of death, comes in, *Mortis Anatomia*, and in what manner and likeness he comes. For the light of nature shows

that death comes in as many forms as there are species from the elements: so many kinds of corruption so many kinds of death, and as each corruption gives birth to another, it requires anatomy: it comes in many forms until one after another we all die and are consumed through corruption. But beyond all these anatomies, there is also a uniform science in the anatomy of medicine, and beyond them all are firmament, earth, water, and air: thither anatomy is brought into new action and the firmament and all the stars appear in it. For Saturn must give his *Saturnum*, Mars his *Martem*, and until these are discovered, the science of medicine is not fully revealed. For as the tree grows out of the seed, so must all that seems now invisible grow into new life, for it is there, and it must come to pass that it shall be visible. For the light of nature is a light to make men see and it is neither dark nor dim: and it must come to pass that we shall use our eyes in that light to see those things that we require to see. They will not be otherwise than they are now; but we must be otherwise able to see them, and then the light of nature will give vision to the very peasant."

My old friend Lady Huggins writes:

"The fulfilment of this remarkable prediction may be considered to have begun with Sir Isaac Newton's discovery of the decomposition of light by the prism, his experiments being included in his treatise on 'Opticks' pre-

sented to the Royal Society in 1675. The dark lines which Newton failed to see in the solar *spectrum* were first described by Wollaston in 1792; and about 1815 Fraunhofer made a great advance and mapped some six hundred of them. Later on the way was prepared, more or less, by Foucault, Balfour, Stewart, and Angström; and prophetic guesses were made by Stokes and Lord Kelvin.

"But it was Kirchhof and Bunsen at Heidelberg in 1859 who first proved beyond question that the dark lines in the solar *spectrum* are produced by the absorption of the vapours of the same substances, which when suitably heated give out corresponding bright lines; and further that many of the solar absorbing vapours are those of substances found upon the earth. These epoch-making experiments mark the birth of the science of *Spectrum Analysis.*

"The extension of spectrum analysis to the stars and other heavenly bodies soon followed. The effective founders of stellar spectroscopy, 1862, being, in England, Sir William Huggins, with whom was associated at first Professor W. A. Miller; and in Italy Padre Secchi. The chief work of Secchi was a survey of some four thousand stars and their distribution into four classes or types—a most useful work.

"The work of Huggins and Miller was of a more searching and far-reaching character, and consisted of, first, an elaborate mapping in wave-lengths of the *spectra* of the chemical elements; and second, of the mapping of a large

number of stellar *spectra*, and their comparison with chemical *spectra*. The work was the birth of *Astrophysics*.

"The *spectra* of the planets were early investigated by Huggins; and later by Vogel. Mars was shown to have an atmosphere very similar to our own; the *spectrum* of Saturn has some special peculiarities, although also showing many of the Fraunhofer lines.

"In a later and novel astrophysical research, begun in 1876, into the *ultra-violet* region of the *spectrum*, possible only through photography, the eye being incompetent to see beyond certain wave-lengths, at each end of the spectrum, Sir William and Lady Huggins not only discovered further proofs of the presence in the stars of the chemical elements as we know them, or can modify them, but also discovered facts relating to hydrogen which were then unknown to terrestrial chemistry. Some years later these new facts were verified in his laboratory by Cornu."

These scientific data have been sent to me expressly to illustrate Hohenheim's marvellous inductive intuition. The "Light of Nature" truly made him *see*, neither darkly nor dimly.

Paracelsus occupies the remainder of this celebrated chapter by condemning names given to diseases on the basis of a single symptom, instead of from either their origin, substance, and course, or their treatment, and he closes with an appeal to members of the medical

and theological professions to open their eyes and see the wonderful works of God in all that concerns the body and all that concerns the soul.

"For the two professions cannot be separated one from the other: the body is the dwelling place of the soul, therefore the one depends upon the other and the one reveals the other."

The final chapters of this book relate to the marvellous hidden powers by which the development of all living creatures is achieved according to the type of each:

"A seed contains its tree, but only in the ground can it grow. The earth is the craftsman who makes the invisible visible. . . . All our nourishment becomes ourselves: we eat ourselves into being, and so also in sickness, with this difference, that the medicine must be according to the character of the sickness. All that is worn out in health is restored to each member by and in itself. Do not be astonished at this: a tree which stands in the field would not be a tree had it no nourishment. What is nourishment? It is not mere feeding or stuffing, but it is restoration of the form. What is hunger? It is a reminder of future death in the waste of the members. For the form is carved by God Himself in the mother's body. This carving abides in the form of each type. But it wastes and dies without addition from without. He who does not eat does not grow,

he who does not eat does not last. Therefore he who grows grows by nourishment, and the shaper is with him to restore the form, and without it he cannot exist: whence it follows that the nourishment of each carven type has the form within itself in which it makes to grow and restores. Rain has the tree in itself and so has the earth-sap: rain is its drink, *liquor terræ* its food by which the tree grows. What is it that grows? What the tree absorbs from rain and earth-sap becomes wood and bark: the shaper is in the seed, wood and bark are in the *liquor terræ* and the rain: the craftsman in the seed can make wood out of these two things. And it is the same with plants: the seed has the beginning in which is the form and the craftsman, the type and property: if it is to come further, the rain, dew, and *liquor terræ* must develop the plant, for in these are the stalks, leaves, flowers, and so on.

"There must therefore be an outward form in all nourishment for growth: and if we do not receive it we do not grow up, but die in the neglected form. And if we are grown up, we must preserve our form lest it waste away. For we have in us what resembles fire: which consumes our form away. If we did not supply and support the form of our body, it would die neglected. Therefore what we eat becomes ourselves, so that we do not die through consuming of the form: in this way we eat our fingers, our body, blood, flesh, foot, brain, heart, et cetera. For every bite we take contains in itself all our members, all that is in-

cluded in the whole man, all of which he is constituted. . . . When summer is at hand, the trees become hungry because they would then put out leaves, flowers, and fruit. They have not got these within themselves else would trees that are cut down put forth leaves as well as those which stand in the ground. They stand in the earth whence they receive these things into their own form, where the craftsman shapes them according to the kind of each: that is his contribution. . . . Know therefore that in order to preserve their form and type from being consumed, all living things become hungry and thirsty. . . .

"There are two men, visible and invisible: that which is visible is two-fold, the body and soul; that which is invisible is single and of the body, as an image carved out of wood in which no body was at first discerned. This is the nourishment, which once in the body goes into all its members: it does not remain in one part, but is richly used; for the great Artist carves it, He who makes man, that is, He distributes to the members. Now we know that we eat ourselves: every tree and every creature that lives, and we must now learn further what follows from this concerning medicine. . . . We do not eat bone, blood vessels, ligaments, and rarely brain, heart, and suet, therefore bone does not make bone, nor brain brain, but every bite contains all these. If the bone is invisible it is none the less there. Bread is blood, but who sees it? it is also fat, who sees it? . . . For the master-craftsman in the stomach is

good. He can make iron out of sulphur, which is sulphur: he is there daily and shapes the man according to his form. He can make diamonds out of salt, and gold out of mercury: but he is more anxious concerning men than concerning things, so he labours at him in all that is necessary: bring him the material, let him divide and shape it as it should be; he knows the measure, weight, number, proportion, length and all.

"Know then that every creature is two-fold, one out of the seed, the other out of the nourishment: he has death within himself and must maintain himself against it."

Paracelsus dwells further upon this and points out that although the body which a man receives at first is given him in justice, that with which he is maintained is given him in mercy:

"He receives his first nourishment from his mother through mother-love, and then he receives it by the mercy of God, to whom his daily petition rises: 'Give us this day our daily bread,' which also means 'Give us this day our daily body.' . . . It is for this that Christ taught us to pray, just as if He had said: 'The body received from your mother is not sufficient: it might have died to-day, yesterday, or long ago.' Bread is now and henceforth your body: you live no longer by the body of justice, but by the body of mercy: therefore pray your heavenly Father for your daily bread, that is, for your daily body which is

the body of mercy: we eat ourselves daily not in justice but in mercy and prayer."

The eighth chapter expands this conception of our food and its daily renewal and counsels that moderation in eating which is involved in the daily petition: not more than we need day by day. "In this manner we are renewed. But as we use manure to grow our bread, disease may come from it, and if we eat too much, many diseases will ensue which would have not come had we observed Christ's commandment and His petition. For such maladies the physician is provided, for God is merciful and forgives our trespasses. The physician is provided to protect the body in which the soul dwells. Therefore the office of physician is a high one and not so easy as many imagine. For just as Christ commissioned the apostles: 'Go hence, cleanse the lepers, make straight the crooked, give sight to the blind,' so the physician is as much concerned in these things as the apostles. He therefore who does not know how to cleanse leprosy does not understand the power of medicine: he who cannot make straight the crooked is no doctor. For God has not appointed the doctor only for colds, headaches, abscesses, and toothache, but also for leprosy, epilepsy, and the like without exception. All healing substances are in the earth; they grow there, but the men are not there who should gather them: were the right men there unperverted by lying sophistry, we should be able to cleanse the lepers and make the blind

to see. For the sophistical high fashion leaves the mysteries of nature unrevealed with all their hidden virtues. Such doctors justify their ignorance by saying: 'Such and such a disease is incurable.' By which they do not only expose their folly, but also their mendacity. For God has permitted no disease to come whose cure He has not provided. Have ye forgotten that God imparts to us daily our day's body, and shall He not impart to us the means to heal our diseases, each at its appointed hour?"

This chapter ends with the reminder that nature is mysterious, hidden, that she works in a mysterious way, that this way is not by magic, sorcery, or by aid of the devil, but that it is occult so that men may inquire into it, for there are many things in nature which we do not yet know, much science, knowledge, wisdom.

"For these things were not only concealed in the apple forbidden to Adam, but were concealed also in many other things which it might have been better not to discover. For God has forbidden some things to make known their power. Poisons are on the earth and in them is death, and other things are on the earth in whom is life. There is that which makes sickness and there is also that which makes health. But there is little searching out of such things, little trouble taken to gain knowledge. The profession is ruined by symptom-seeking:

that suffices to produce the fee and they desire only that. Since so little suffices, why should they exert themselves? The penny is what they seek."

The second book of the "Opus Paramirum" consists, like the first, of eight chapters, which treat in detail of the three primary substances. In the first, Paracelsus shows that although a grain of corn seems to be one substance, it is in reality three, and in the same way the human body consists of three substances so combined as to form a unity.

"The body," he says, "is developed from sulphur, that is, the whole body is one sulphur, and that a subtle sulphur which burns and destroys invisibly. Blood is one sulphur, flesh is another, the parts of the head another, the marrow another, and so on; and this sulphur is volatile. But the different bones are also sulphur, only their sulphur is fixed: in scientific analysis each sulphur can be distinguished. But the stiffening together of the body comes from salt: without the salt no part of the body could be grasped; for from salt the diamond receives its hard texture, the lead its soft texture, alabaster its soft texture, and so on. All stiffening or coagulation is from salt. There is therefore one salt in the bones, another in the blood, another in the flesh, another in the brain, and so on. For as many as there are sulphurs there are also salts. The third substance of the body is mercury, which is a fluid. All parts

of the body have their own fluid: thus the blood has one, the flesh has another, the bones, the marrow, each has its own fluid which is mercury. So that mercury has as many forms as sulphur and salt. But since man must have a complete form, its various parts must coagulate and stiffen and must have fluid: the three form and unite one body. It is one body but of three substances.

"Sulphur burns, it is only a sulphur; salt is an alkali, for it is fixed; mercury is a vapour or smoke, for it does not burn, but dissolves in fire. Know then that all dissolution, corruption, arises from these three."

Paracelsus then brings his system into the consideration of disease, its varieties, features, conditions, complexion, development, and cure.

The second chapter is given to medicines in the three substances and their specific uses. How cosmic is his view may be gathered from the following paragraph:

"The three substances are in the four elements, or mothers of all things; for out of the elements proceed all things: from earth come plants, trees and all their varieties; from water, metals, stones, and all minerals; from the air, dew and manna; from fire, thunder, flashes of light, snow, and hail. And when the microcosm is broken up and destroyed, part becomes earth, and so wonderful that in brief time it bears the fruits whose seed has been sown therein, and this the doctor should know. Out of the

broken body, too, comes the other element of water; and as water is the mother of the minerals, the alchemist can compound rubies out of it. And the dissolution too gives the third element, fire, from which hail can be drawn. And air too ascends with the rising of the breath, just as dew forms inside a closed glass. There is another transmutation after these, and it yields every kind of sulphur, salt, and mercury. How necessary is it therefore to make visible the microcosmic world, for it contains much that is for a man's health, his water of life, his *arcanum*, his balsam, his golden drink and the like. All these things are in the microcosm; as they are in the outer world, just so are they in the inner world."

He uses the terms of ideal alchemy to signify all healing powers resident in the body of man, as they are resident in the body of nature. There follows a passage of great significance, one of which the medical practitioners of his time were in dire need and whose value it took centuries to prove:

"Therefore man is his own doctor; for as he helps nature she gives him what he needs, and gives him his herbal garden according to the requirements of his anatomy. If we consider and observe all things fundamentally we discover that in ourselves is our physician and in our own nature are all things that we need. Take our wounds: what is needed for the healing of wounds? Nothing except that the

flesh should grow from within outwards, not from the outside inwards. Therefore the treatment of wounds is a defensive treatment, that no contingency from without may hinder our nature in her working. In this way our nature heals itself and levels and fills up itself, as surgery teaches the experienced surgeon. For the *mumia* is the man himself, the *mumia* is the balsam which heals the wound: mastic, gums, glaze will not give a morsel of flesh; but the physician's province is to protect the working of nature so as to assist it."

Hohenheim's use of the word *mumia* to signify the power of nature in the body, the healing force within, must not be confounded with the practice of that time to add a shred of dried mummy, or of mummy-cloth, to potions administered to the sick, a practice to which Browning alludes in the lines which he puts in Hohenheim's mouth when, in his poem, Festus meets him at Colmar:

> And strew faint sweetness from some old
> Egyptian's fine worm-eaten shroud
> Which breaks to dust when once unrolled.

This splendid reform in surgery is further explained in a later work, his "Greater Surgery," written in 1536, but its discovery belongs to the years spent in the Dutch, Danish, and Italian wars. Ambroise Paré, who in 1531 must have been about twenty years old, was the first great surgeon to adopt this rational

treatment, and he acknowledged his debt to Paracelsus in the earliest, incomplete edition of his works, an acknowledgment endorsed by Dr. Maignan in 1840, when Paré's complete works were republished under his editorship.

"The power of medicine," continues Paracelsus, "is to be understood in two ways, in the great world and in man. One way is protective, the other curative. If we protect nature she uses her own science, for without science she would not succeed. But when doctors require to use their science, then are they the healers."

Next follows the form in which he apprehended the famous Renascence conception of the macrocosm and the microcosm, to which we owe the initial steps leading to the liberation of physics from metaphysics.

"Since man derives from limbo and limbo is the whole world, it follows that each several thing in one finds its like in the other. For were man not made out of the whole in every part of the whole, he could not be the microcosm, the little world, nor would he be capable of attracting to himself all that is in the great world. But as he is made out of the whole, all that he eats out of the great world is part of himself: for he must be maintained by that of which he is made. For as a son is born from his father and no one helps the son so naturally

as the father, in the same way the curative members of the outer world help the members of the inner world. For the great world has all human proportions, divisions, parts, members, as man has; and man receives these in food and medicine. These parts are separated one from another for the sake of the whole and its form. In science their general body is the *Physicum Corpus*. So man's body receives the body of the world, as a son his father's blood; for these are one blood and one body separated only by the soul, but in science without separation. It follows then that in natural philosophy heaven and earth, air and water are a man; and man is a world with heaven, earth, air, and water, just as in science. Saturn receives his Saturnian microcosm from the heavens; and Jupiter receives the Jovian microcosm from the heavens; balm receives its microcosm of balm from the earth; the gilly-flower receives its microcosm of gilly-flower from the earth; and the minerals take each its microcosm from water; and the dew and manna from the air; and they are all in union; therefore heaven, earth, air, and water are one substance, not four, nor two, nor three, but one: where they are not in union, the substance has been destroyed or broken up.

"We must understand therefore that when we administer medicine, we administer the whole world: that is, all the virtue of heaven, earth, air, and water. Because if there is sickness in the body, all the healthy members must fight against it, not only one, but all. For one sickness can be death to them all: note

how nature struggles against sickness with all her power. Therefore your medicine must contain the whole firmament of both upper and lower spheres. Think with what energy nature strives against death when she takes heaven and earth with all their powers to help her. So too must the soul fight against the devil with all her might. . . . Nature has a horror of cruel and bitter death whom our eyes cannot see, nor our hands clutch. But nature sees and knows and clutches him: therefore she employs the powers of heaven and earth against the terrible one, for terrible he is and monstrous, hideous and harsh. So He who made him found him, Christ on the Mount of Olives, who sweated blood and prayed His Father to remove him from Him: it is but reasonable therefore that nature should abhor him. For the better death is known, the greater is the value of medicine, a refuge which the wise seek."

In the third chapter Paracelsus still descants upon death, its powers and its limitations; but in the fourth he returns to the three primary substances and the diseases originated by their curruption. He notes among the diseases attributable to mercury gout, mania, frenzy, pustules, syphilis, leprosy and the like. In the fifth chapter, dealing with salt and its varieties, he attributes to their corruption the different diseases of the skin, as eruption, itching, mange, eczema. The sixth chapter explains the action of sulphur in the four elements as the origin of

the elemental diseases, which he classifies as cold, hot, dry, and moist.

The seventh chapter concerns diseases which are not caused by these and other previously explained conditions. Such diseases, he says, are of two kinds, those which are dormant in the seed and those which arise from specific influences:

"There are influences which cause sweating, purgation, heat and the like and which must be reckoned with, for they are specific maladies: they do not spring from visible causes, but are innate and of such a nature that one man has a tendency to sweat, another to purgation, another to this or that. For know that from the spermata far more births take place than are realised: the camphor and other plants demonstrate that, and from the seed are born diseases of the bladder and of the kidneys. Such too is tartar (acidity), which forms stone. . . . What is hereditary we cannot eradicate, for the seed must produce all that is dormant within it. But it is not necessarily hereditary to be born blind; and although a man may be born blind, sight may be in him although not properly developed. If a man has six fingers on one hand and four on the other, or if they are not in their right places, nothing can be done for him, because the defect is in the substance of the body. But no experienced doctor can say that the blind man may not be helped, for nature is great and wonderful, and if sight is within him it may be produced,

for sight is an ether that has no body and it may be guided to its own place, from which the injury has removed it. Innate things are like the hardness of iron and the colour of chalk, and must be accepted as they happen. For we cannot hinder snow from falling, but we can prevent it from doing harm to men. Just so is the seed of man which is limbo and out of the four elements. These powers are best called influences, for they are influences. It is an astronomical error when men say that an influence comes from the stars. The heavens send no influences. We receive our form straight from the hand of God. Whatever we may be, God has made us and carved all our members. Our conditions, properties, habits, we receive from the inbreathing of life wherewith these things are given to us. What diseases we have come to us out of the three substances, as already described, which have something to impress on us, as fire on wood or straw, or saffron on water. That is the influence which we cannot drive away from us, as we can drive away the maladies originating from outside us in limbo. Men speak of an *Inclinatio*: it is nonsense. They say the man receives an *Inclinatio* from Mars, Saturn, the moon, and so on: it is error and deception. It would be more reasonable to say 'Mars counterfeits the man,' for man is greater than Mars or the other planets. He who knows the heavens and understands men says nothing. He might say: 'Man is so noble in God's eyes and so highly accounted that his image is in the heavens with all he does and

leaves undone, his good and his evil.' But that is not *Inclinatio*. A man may become fat and it is not the fault of his food : or he may become thin and his food does not help him. And the doctors set it down not to the specific influences, but declare with the ignorant astrologers that it is *melancholia* due to Saturn in the ascendant : man owes nothing to the ascendant ; he owes it to limbo and he is made by the hand of God, not by the ascendant, nor by planets, nor by constellations and the like, as if these could compel him to be either lean or fat. We require to understand these maladies thoroughly so as to distinguish them from the other maladies already explained. They will be treated in their own chapter."

In the eighth and last chapter, Paracelsus goes beyond the visible body created by God out of the elements to the invisible body which is in every man and which was breathed into men by God. It is in the invisible body that men can sin and make the physical body to sin.

" As we find written we must rise on the last day in our body and give account of our misdeeds. The body which is invisible has sinned and must rise again with us. For we shall not give an account of our sicknesses nor of our health and the like, but of the things that proceed from the heart, for these concern man and these too are a body, not out of limbo but from the breath of God. But since we shall in our flesh see God our Saviour, it must be that the body

made out of limbo, which is our body of flesh, shall be there too. Who would wish to be ignorant of those things revealed through the mouth of God ? We shall rise again in the flesh, in the body out of limbo, which has its own measure and uses, and what exceeds that measure comes from the invisible body which transcends the bounds of nature. . . ."

The " Opus Paramirum " closes with a second address to Joachim von Watt, echoing Hohenheim's bitter cry : " Who hath believed my report ? "

" Strange, new, amazing, unheard of, they say are my physics, my meteorics, my theory, my practice. And how should I be otherwise than strange to men who have never wandered in the sun ? I am not afraid of the Aristotelian crowd, nor of the Ptolemaic, nor of that of Avicenna ; but I fear the insults ever thrown in my way and the untimely judgment, custom, order, which they call jurisprudence. Unto whom the gift is given he receives it : who is not called I need not call. But may God be with us our Defender and our Shield, to all eternity.

" Vale."

CHAPTER XI

RENEWED WANDERING

This life of mine
Must be lived out and a grave thoroughly earned.

THERE is not space in which to treat of the remaining books, of the "Paramirum," for the present biographer's aim is rather to vindicate a great man's fame than to attempt the appraisal of what he did for the evolution of research. When his works are translated into English by a writer scientifically fitted to deal with them, the pre-eminent part which Paracelsus played in the many-sided European renascence will be acknowledged and assessed at its true value.

He knew himself that his entire mind on transcendent matters of both physical and spiritual life could be comprehended only by acquaintance with the whole body of his writings, and he repeatedly expressed his urgent desire that his readers should not content themselves with one treatise or one volume. The words to the "Reader" with which he prefaces the third book of the "Paramirum" are specific on this point:

"Rough and harsh are the winds which the truth arouses against its followers, and yet I have ever hoped that He who loves the soul of man loves also his body, that He who saves the soul saves also the body, and therein I have thought to work some little good. But by many it was reft from me and that was a rough wind to me. Therefore, reader, take heed not to judge from the first, the second, nor the third chapter, but observe it out to the end and test with thine own proving that which I touch upon in these pages. Do not be startled by what I handle, but consider and estimate it without favour and friendship, fairly weighing it: for by God's predestination more books will follow built upon this foundation; and these will more fully supply thee, therefore understand this and learn it."

When the first and second books of the "Paramirum" were completed, Hohenheim left St. Gallen, and, it would seem, rested from writing on medicine for some months. He gave himself up to evangelistic work and especially to the teaching and distribution of the Bible. He says in the third book that he "gave up medicine to ply other trades." He wandered through Appenzel and its mountains seeking out the poor and sick, and while healing the latter, telling the good tidings which had so long been withheld from them. This active medical missionary work amply accounts for the calumnies propagated and maintained by priests and friars

against him. Not alone were the academic bodies banded to oppose and undermine his teaching, but the Catholic Church took part in their despicable intrigues. Only those men who were emancipated from the double bondage, the nobler sons of the Renascence, were Hohenheim's friends. Had he been the irreligious sot his enemies proclaimed him, they would not have feared him as they did. He was a man of profound spiritual insight and unassailable faith in God, lofty as that of the prophets and psalmists of Israel.

Paracelsus lived some years in Switzerland and more particularly in Appenzel, but his footsteps are hard to trace and his allusions to this time are vague. It is surmised that he was resident in the commune of Urnäsch for a considerable time, changing his lodgings at intervals. In 1838 several houses retained the tradition of having sheltered him. Probably he spent the greater part of three years between Urnäsch and Huntvil, and in addition to his evangelistic work returned to writing, and not only completed the "Paramirum" and the "Paragranum," but continued his "Greater Surgery." He left behind him when he quitted Urnäsch a portfolio full of writings and this was in the possession of a man who died at Huntvil in 1760, whose heirs divided the manuscripts amongst them, as they could not decide who should inherit the whole. Some of these

were on sacred subjects and in Latin, one entitled *Quod Sanguis et Caro Christi sit in Pane et Vino*, and another, also on the "Lord's Supper," was addressed to those like-minded friends in Appenzel with whom he had sat down to the communion table at a hamlet called Roggenhalm, close to Bühler, a village near Gais.

That he wandered from village to village is certain, and probably he covered far more ground than his allusions indicate. His work combined the avocations of colporteur, evangelist, and itinerary physician.

"Here, in Appenzel country," says Dr. Julius Hartmann, "he fortified himself with his fellow-believers in the Gospel and conversed on things eternal; there he attended the poor and sick, by whom his help was so urgently needed, and as he himself finely says, 'cared for the body in which the immortal dwells.'"

It was this occupation with the spiritual as well as the corporeal needs of men that rekindled the fire of his persecution, this time by the priests, and so fierce was their resentment that they persecuted even the men who showed him hospitality. Their animosity reduced Hohenheim to great straits. Lodging, food, and clothes failed him, for when priests persecute it is with the cowardly weapon of terrorism. Even the *amici et sodales*, with whom he had sat at the Lord's Table, began to fall off, cowed

by the "pfaffen"-fury, and there remained no course for him but to leave Switzerland a second time in haste. It is no wonder that he disowned Switzerland as a fatherland and claimed rather Villach than Einsiedeln as his "home."

Early in the spring of 1534 he fled, in poverty so utter that his garments were tattered, and made his way through the mountains and by the upper valley of the Inn to Innsbrück. He returned to the profession as well as to the practice of medicine, for "the body in which the immortal dwells" lives by bread, and that had been hard to win in evangelistic work. He applied to the burgomaster for permission to practise at Innsbrück as physician, but it was denied on the ground that a man in rags could not be a doctor. Had he presented himself in crimson robe with chain and ring of gold, his degree would not have been disputed, but Paracelsus was not an adept in the "philosophy of clothes." He was always careless in this respect, but at such a crisis, after starvation, persecution, homelessness, and wandering, he was hardly to be blamed for his appearance. Bitterly he records this incident in his "Book of the Plague," which was first published by Dr. Toxites at Strassburg in 1576, thirty-five years after Hohenheim's death.

"Because I did not appear in the garnishry of the doctors, I was despatched with contempt and was forced to clear out. The burgomaster

of Innsbrück had been used to doctors clad in silken robes at the courts of princes, not in shabby rags grilled by the sun."

So he took to the road again and made his way by the Brenner Pass to Stertzing, where plague had just broken out in the hospital. This gives us the date June, 1534. In July and August it was raging in the town. Paracelsus stayed some weeks at Stertzing and was appalled at the ignorance and helplessness of the local doctors. He had encountered the plague in his earlier travels and had noted its causes and conditions as well as its treatment in different lands. He decided to put his own experience and opinion into writing for the benefit of the afflicted town to which he dedicated this famous treatise. He appended to his diagnosis of the plague a series of counsels as to its treatment and a number of prescriptions and recipes. The little book in four chapters was presented to the "Burgomaster and Magistrates of Stertzingen, by Theophrastus von Hohenheim, professor of the Holy Scriptures and doctor of both medicines."

He received little thanks for his book from the civic worthies, but it is probable that during his stay in Stertzing he practised as one knowing the plague and made enough of money to provide himself with necessary clothing, food, and lodging. He made two friends there, the brothers Poschinger, with one of whom he went to Meran

and found there honour and hospitality. At Meran he finished his book and wrote its Introduction.

It was while he was either at Stertzing or Meran that his father, Dr. Wilhelm von Hohenheim, died, but the news did not reach him for four years. His travels were continuous during those years and the magistrates of Villach must have lost all trace of his whereabouts.

Toxites was a native of Stertzing and, as Dr. Sudhoff suggests, probably saw and copied the original manuscript of Hohenheim's "Book of the Plague," which he was the first to publish. Huser's edition is thirteen years later than that of Toxites and is apparently founded upon the earlier, with some comparison of the printed book and a manuscript copy.

From Meran Hohenheim made his way into the mountain districts near Stertzing and towards Salzburg, and explored them, crossing the Penser Pass to the Hohenthauern and visiting the Krymlerthauern, the Felberthauern, the Fuschk, and the Raurischerthauern, and so recovered some of his lost time in the study of mountain diseases. He alludes to this spell of mountaineering in the first and second books of his "Greater Surgery," and describes the symptoms of frost-bite and other ailments in these glacial regions, as well as their remedies. He turned westwards from the barren labyrinth of the Thauern mountains and made his way

to the Tyrol and Upper Engadine, pausing at Veltlin, where he noted the freedom from gouty diseases amongst the natives, and spending some time at St. Moritz to analyse the acid water of its famous spring, an account of whose qualities and medicinal value he added to his record of "Natural Waters."

In August, 1535, the abbot of Pfäffers sent for him and invited him to stay at the monastery while he required his aid, so that he had time to investigate another mineral water of great and continuous healing power, which he described in a little book dedicated to his host, the Abbot Johann Jakob Russinger. This book was printed in the following year, apparently at the abbot's instigation, at Zürich or St. Gallen, and it was mentioned in Stumpf's "Swiss Chronicle" for 1548. It bears the title "Concerning the Pfeffers Bath situated in Upper Switzerland, its virtues, powers, and effects, its source and derivation, its management and regulation; by the most learned Doctor Theophrastus Paracelsus." There is no clue to the printer nor to the place of printing. In 1571 the little book was published at Strassburg, edited by Toxites and printed by Christian Müller, and nineteen years later it was included in the seventh part of Huser's edition. As Huser gives no reference to his authority, it is probable that he used the abbot's impression, as did Toxites, making a few verbal changes. The

treatise was translated into Latin in 1570 and later editions of the original were published in 1594 and 1619, the latter by the Abbot of Pfäffers then in office, Michael von der Hohen Sax. Paracelsus tells how he saw the sick persons lowered from a wooden house high over the gorge down into the healing waters of the spring.

Early in September, 1535, he had left Pfäffers and had taken the mountain road towards Wirtemberg. He did much climbing, and in the chapter upon frost and its dangers he mentions the St. Gothard, the Splügen, the Albula, the Bernina, and the Hacken Passes. The last is between Schwitz and Einsiedeln, and its occurrence in his book leads us to conjecture that he may have visited his birthplace as he fared westwards. Apparently he halted at Memmingen and certainly at Mindelheim, where he cured the town clerk, Adam Reyssner, of an illness which had troubled him for years. Toxites heard of it from Reyssner himself. "If you take the two medicines ordered," said Hohenheim, "you will need to ask no doctor's advice for years to come." Reyssner took them and not only got well, but kept well till he was an old man.

By the end of 1535 Paracelsus had finished the most influential of his works, "The Greater Surgery." He was anxious to publish it at Ulm and made his way thither early in 1536,

carrying his manuscript with him. He negotiated a contract with Hans Varnier and the printing began. But when the proof-sheets reached him, they were a mass of errors. Varnier had not observed that part of the agreement which concerned the correction of proofs and they were hopelessly disfigured. Paracelsus left Ulm with his manuscripts and took them to Augsburg, where he made an arrangement for their printing with Heinrich Steiner. Varnier went on with the production in spite of the lamentable condition of his proof-sheets and published "The Greater Surgery" that year in most faulty form.

At Augsburg the authentic edition appeared, the first volume on July 28 and the second on August 22, 1536. Paracelsus had taken great pains to make it perfect. He dictated the manuscript to an assistant, personally superintended the press correction, and intimated in a preface to the reader that the Augsburg edition was the only valid publication of his book. It was dedicated to the "Most Mighty and August Prince and Lord, Ferdinand, King of Rome and Archduke of Austria."

The titles run:

"Concerning the Greater Surgery, the first volume, by the instructed and attested doctor in both medicines, Paracelsus: Of all wounds by stabbing, shooting, burning, bite, bone-breaking, and all that surgery includes, with

the cure and understanding of all accidents present or to come, pointed out without errors. Concerning the discoveries of both the old and the new science, nothing omitted."

" Concerning the Greater Surgery, the second volume, by the instructed and attested doctor of both medicines, Paracelsus : Of open sores and hurts, their cause and cure, according to proved experience without error and further experiment."

The dedication of the second volume is also to the Emperor Ferdinand, but is somewhat differently worded :

" To the Most Mighty, Most August Prince and Lord, Ferdinand, by God's Grace King of Rome, Hungary and Bohemia, Archduke of Austria, our most Gracious Lord."

The first volume was illustrated by a woodcut occupying half a page : it represents a plastered court with a vaulted gate before which are two wounded knights. One lies near the steps of the gateway with a wound in his head, his body thrust through by a short sword, the point of which shows at the back ; the other wounded man sits on a log of wood with his head bare, great wounds in his right shoulder and thigh, wounds from stabbing in his breast and with both his hands hewn off, blood pouring from the stumps, while on the ground before him lie the hands, a helmet with feathers, and a long sword.

The wood-cut of the second volume shows a sick man on the right, his left thigh covered with ulcers, his leg stretched out on a folding-chair near which a doctor stands and rubs a salve into the sores with a spatula; on the left the barber stands in an elegantly sprawling attitude, his left foot placed on a stool and plaster spread on his knee, evidently considering himself the chief person present.

On the reverse side of the title-page, Paracelsus addresses the reader and explains to him his mishap at Ulm and his disavowal of Varnier's edition, and asks him to use the Augsburg edition, which is corrected and amended by the author.

No book of Hohenheim's has been so often republished as this. Before the end of the sixteenth century nineteen editions had appeared, amongst them several Dutch versions, two Latin versions, and two French versions translated from the second Latin version. Many other editions succeeded these. It was possibly from Gerard Dorn's Latin translation that the famous French surgeon Ambroise Paré learnt and assimilated Hohenheim's treatment of wounds received in battle. Paré was a man of like temperament, and one of his famous sayings might have been Hohenheim's: "I dressed him and God healed him."

In August, 1536, immediately after the completed publication of this great work, Paracelsus

issued his "Prognostication concerning twenty-four years to come," dedicated to the Emperor Ferdinand and printed by Heinrich Steiner at Augsburg. It was translated almost immediately into Latin by Marcus Tatius, teacher of poetry in the Hoch Schule at Ingolstadt and translator of many classics, who just at this time was bringing out a book with Heinrich Steiner and so made Hohenheim's acquaintance. Second and third undated Latin editions followed.

It was customary in those years, when newspapers did not exist, to publish almanacks at the beginning of the year with information from the past and predictions regarding the future year, and these included within their scope the Empire, the Papacy, the monarchies of the west and the sultanates of the east. We have already mentioned the predictions by Paracelsus published in Nüremberg by Peypus: he returned from time to time to this kind of composition, moved partly by the knowledge acquired in his travels, and partly by his extraordinary insight into the working out of causes towards events. As a scientist he had abandoned astrological superstition, but as a mystic he was conscious of gifts which allied him to the seers of old, and as a Bible student he believed in the powers of men who like himself abode much in solitude and in communion with God. In all his greater books we find the careful research of a scientific student

closely allied to a deep and inextinguishable sense of the spiritual, above all of God, the omnipotent, the omniscient, the omnipresent. If with his eyes and his intelligence he patiently mastered the pages of nature's book, with his spiritual consciousness he learnt of God and knew Him not alone in His visible creation, but in the historic past, the roused and awakened present, and in flashes of revelation from behind the veil. Paracelsus was aware that

> in man's self arise
> August anticipations, symbols, types
> Of a dim splendour ever on before
> In that eternal circle life pursues.

The booklet was illustrated by two wood-cuts, one of a student sitting at a reading-desk, holding a sphere in his left hand and pointing to the sky with his right. Through the open window the sun and eight stars are visible, the latter probably symbolising the eight heavens. The second wood-cut shows the four winds blowing towards the centre. In Huser's edition of the "Prognostication" which finds a place in the tenth volume of his collection, there are thirty-two symbolic wood-cuts to illustrate the predictions, two of which, as Dr. Aberle tells us, were reproduced in a flying-sheet issued in 1606. This flying-sheet may still be seen in the Vienna Libraries and in the Museum Carolina Augusteum in Salzburg. The two selected illustrate Hohenheim's prediction

concerning his own works. One gives the portrait of the scholastic doctor, adorned with golden ring and other splendours, telling his beads, but one-eyed and so bound by the fetters of authority that he can look neither behind him nor before and grows stiff with horror at sight of Azoth, Hohenheim's sword, and so terrified by its handle-knob that he shatters upon it his head and what it contains of reason. The illustration pictures the unhappy man ringed round by interwoven cordage, holding his paternoster and staring with his one eye. On the other edge of the flying-sheet is the companion picture with its prophecy. A child's head rises from the ground on the left corner and looks with lively interest at a heap of books, some of them inscribed with a capital R and one with the word *Rosa*, rolls of manuscript amongst them. The child asks: "What are they?" And the prophecy explains:

"Some twenty years after I am dead, both young and old will know what my knowledge was, although at present it suffers discredit. Truth will then bring to light its work; all false medicine will be destroyed and with it all other stupidity, and men will find that in my writings are to be found all the healing powers of both the earth and the heavens."

This prediction was fulfilled by the copious publication of Hohenheim's works after his

death. But the reaction brought about by the powers of darkness contrived to arrest their influence, and for more than three centuries he was accused of borrowing his great conceptions from men who were either not yet born when he died or whose writings did not appear for twenty years after that event. Isaac Hollandus and Basilius Valentinus were two of the alleged forerunners of Hohenheim. The first belonged at the earliest to 1560, and the second wrote his treatise "On the Philosopher's Stone" in 1599. It is quite probable that both men drew their tenets from Hohenheim's books.

Paracelsus was the forerunner of all scientific progress from the sixteenth to the nineteenth century. He needed no guidance from his contemporaries, above whom he towered. He refused to be blinded by the dust of ages which they held sacred. He dared to denounce it as a rubbish-heap and to look at God's creation with vision undimmed by its sophistries, its phantasms, and its mendacities. The man who to-day, from the vantage ground of modern science, descries a new horizon, is acclaimed, and justly, with world-wide homage, but this man, who cleared the way and who refused to be smothered or cowed by the dust and din his iconoclastic genius roused, was persecuted to his last moments. "We," he might well have cried, "who make sport for the gods are hunted to the end."

He kept his vision clear in toil, privation, and unresting pursuit of his aim. There was none to help him save God, to whom he clung and from whom he received his priceless powers at the cost of all that the world counts gain. He bartered no pulse-beat of his soul for fee or reward. His books were altogether his own. From the "Light of Nature" he kindled the lamp of Science, and in that light men in time began to know.

Hohenheim proudly claimed his books as altogether his, and his defiance of the "Aristotelian crowd" ran:

> Eins andern Knecht soll niemand seyn
> Der für sich bleyben kann alleyn.

This was his favourite motto, and in either Latin or German it is to be found below the portraits painted in his lifetime. It may be translated, although less vigorously than in the original:

> That man no other man shall own
> Who to himself belongs alone.

He expanded its sense in his work "De Felice Liberalitate":

"He to whom God has given gifts and wealth shall belong to no other man, but shall be lord of himself and of his own will and heart, so that those things which God has given him shall go joyously forth from him."

Silver and gold had he none, but those gifts

which God had given him went joyously forth from him to others. His books were amongst the greatest of these gifts to men and he claims for them that they were transferred from the pages of the book of nature. It is the doctor's business, he insists, to understand nature and not alone the earthly and mortal nature, but also that which is divine and immortal, for both the eyes of the body and the eyes of the spirit are needed for the full revelation of the works of God. In this understanding of nature, Paracelsus includes the mystical as well as the intellectual perception. His neo-platonism urged this dual point of view. To the ordinary scientific student, the interference of mystical consciousness seems to be inimical to exact research, but Paracelsus was impelled towards research as much by his spiritual as by his intellectual powers. The mystical imagination has ever advanced by prophetic insight the epoch-making discoveries of the student of nature.

" Any one who is practically acquainted with scientific work," said Professor Huxley, " is aware that those who refuse to go beyond fact rarely get as far as fact ; and any one who has studied the history of science knows that almost every great step therein has been made by the ' anticipation of nature.' "

Hohenheim's own anticipations bear out this

truth, one which has been proved again and again in the field of science. The quality of insight is essential to the original mind in whatever field it operates.

In order to understand Hohenheim's point of view we must remember that the revival of neo-platonism in the middle ages was due to Cornelius Agrippa of Nettesheim, who was born at Cologne in 1486, and was just seven years older than Paracelsus. Between the sixth and fifteenth centuries there was a complete suspense of the teaching founded by Ammonius Saccus in the third century, and established by the teaching of his disciple Plotinus. The latter held that God is the foundation of all things, that He is immortal and omnipresent, pure light, while matter and form are illusions, shadows of the soul. God is one and the basis of all thought. Mind is His image. Soul is the product of mind's action and produces other actions, such as faith, aspiration, veneration, which rise towards God; speculation, reasoning, sophistry, which occupy themselves on a lower plane, and the still lower activities of mere physical life. Matter is formed by the soul within it, for every form has its soul whether apparently living or not. In all is divine life, in the stars as on the earth. There is neither time nor space in mind: it is the world of the Spirit, in which presides a supreme Over-Soul and souls possessed of power to think; these

souls tend to the higher or to the lower and alter accordingly. Those that tend to the higher become purified and spiritualised. It is essential to *know* so that one may attain, and he whose mind is illumined sees the Highest, the Light which lightens the world. To him it is given to become united with the Supreme.

Porphyry followed Plotinus and extended his teaching by the tenet that " the universal soul being essentially one with the infinite supreme Spirit may by the power of the Supreme discover and produce everything. An individual soul purified and free from the body may do the same. "

The successors of these three amplified the powers accorded to the illumined soul by knowledge to distinguish between good and evil; healing of diseases; the gift of making wise laws; and the gift of useful inventions. The neo-platonic dogmas fell into abeyance in the sixth century, but revived with the Renascence, when Cornelius Agrippa added to them his own development of their doctrine. Man is the microcosm, the image of nature: the true image of God is the *logos*, the word, which is wisdom, life, light, truth. The spiritual soul in union with God is their image. Celestial light takes invisible form in the soul and gradually shines throughout the body so that it becomes like a star. There is a spiritual power residing in man's soul, which enables him to attract, in-

fluence, and change things, which radiates healing and can be divine, but if used for selfish ends can become diabolic.

To these doctrines some great men in the mental upheaval of Renascence times became converts, amongst them the Abbot Trithemius and his pupil Theophrastus von Hohenheim. Paracelsus developed Cornelius Agrippa's recognition of man's spiritual power by his theory of the *magnes*, the concealed power which attracts to itself those things in other bodies which it influences.

"Man," he says, "has something magnetic in him without which he cannot exist. But this magnetism is there on account of man, not man on account of the magnetism. . . . By this attractive power he draws to himself what is in the air surrounding him: and the healthy are infected by the unhealthy through this magnetic attraction."

Ennemoser says:

"A great part of the system of Paracelsus is based on magnetism. In man there is a something sidereal which stands in connection with the stars from which it has been drawn and attracts their strength to it like a magnet. This life he calls the *Magnes Microcosmi* and explains through it many circumstances in nature. Man is nourished by the four elements, but also imperceptibly through the magnetic

power which resides in all nature and by which every individual member draws its specific nourishment to itself. Those secret influences have their positive office in the maintenance of the body. Upon this theory of magnetism he bases the sympathetic cure of disease. In the *mumia* or magnetic force, he says, all healing power resides, for it draws everything in the whole body to itself."

He was undoubtedly the founder of the school of magnetism and this word originated with him. He says in the fourth book of his treatise "Concerning the origin of Invisible Diseases," which forms the fifth part of the "Paramirum," that however powerful the great world may be, the little world contains all its virtues, all its powers.

"For in man is the nature of all the fruits of the earth, if its ores, its waters, its four winds and all the heavenly bodies. What is there upon earth whose power is not in man? . . . All the powers of the plants and the trees, are to be found in his spiritual body; of its metals, its minerals, its precious stones. . . . If you would have balm, you will find it there: if antimony, you will find it there, and those things work invisibly. For in man there are two forces, a working power which is visible and a working power which is invisible. All hurts which the visible body bears find their healing in the invisible. Just as the power of the lily breaks forth in perfume which is in-

visible, so the invisible body sends forth its healing influence. Just as in the visible body are wonderful activities which the senses can perceive, so too lie powers in the invisible body which can work great wonders."

He found in this *mumia*, or magnetic body, the source of vitality, and he proved that its power could be used by one possessing it to arrest and heal the diseases of others. Many of his own cures were due to its exercise and he used his tinctures only in special cases.

Paracelsus recognised and practised another of the invisible powers of the *mumia*, that which is now accepted and employed as telepathy. Trithemius was aware of it and was able to transfer his thoughts to persons at a distance even when he did not know where they were. He may have confided his experience to Paracelsus, but hardly to many of his pupils, for at that time such a gift would have appeared diabolic to all but the illumined. Trithemius and his greatest pupil placed it among the possibilities of nature. The power was indeed practised by sorcerers and witches to convey the evil which they or their employers desired for their foes and victims, but these people practised it in the faith that evil spirits assisted them, and it was only such men as Trithemius and Paracelsus who treated it as part of the microcosmic equipment. Hohenheim strongly

denounced sorcery and necromancy, because he believed in their potency for evil, just as he denounced the use of hypnotism for evil purposes.

Dr. Franz Hartmann writes:

"The psychic power belonging to the soul and the magical power of the spirit are in the great majority of mankind still only little developed and known. They are often exercised unconsciously so that the greatest sorcerer does not himself know by what means his feats are performed. The powers called into action are the will and the imagination. It is a known law of nature that like associates with like, and if an evil will becomes active, it attracts to itself corresponding evil influences from the invisible realm, which assist the sorcerer in his nefarious work."

In his treatise on "Occult Philosophy," Paracelsus writes of telepathy and hypnotism as capable of much evil, and insists upon the God-inspired and righteous will and imagination for all who use them. "All real strength comes from God: no matter how saintly a man may be, he accomplishes nothing by his own power, because all spiritual power comes from God." Conjurations and consecrations he condemns, "because our power rests in our faith in God, and not in ceremonies and conjurations; but the consecration of the sacraments, especially of baptism, marriage, and

of the body and blood of Christ upon the altar, ought to be held in high esteem until the day when we shall all be made perfectly holy and clothed with a celestial body."

He claimed this faith in God as a flawless armour against the intrusion of evil. Still, he held talismans in some measure of esteem, particularly the double interlaced triangle, and the pentagon inscribed at each corner with one of the syllables of the holy name of God. His trust in healing charms composed of metals and precious stones was based on their magnetic and electric power.

The Paracelsian occultism was mainly that of neo-platonism and the Kabbala, as were also the doctrines of Cornelius Agrippa and in later years of Van Helmont and Jacob Boehme, who were his disciples. Ennemoser tells us that—

"the Kabbala consisted of the sacred idea of God: the primitive spiritual creation and the first spiritual fall; the origin of darkness and chaos; the creation of the world in six periods; the creation of material man and his fall; the restoration of the primitive harmony and the ultimate bringing back of all creatures to God."

In the Schools of the Prophets, which Samuel restored but did not found, the scholars were taught these high mysteries and when found

worthy were inducted into the mysteries of magic, which included presentiments, the power of prognostication, the power of comprehending and influencing all the forces and products of nature, as well as control over certain spirits. The evil side of magic is also present in the Kabbala, but as a thing hateful to God. One of its great dogmas is: "Everywhere the external is the work of the internal: everywhere the external reacts on the internal."

Probably Chaldea was the source from which the seed of Abraham drew these dogmas and possibly in Chaldea they were the heritage bequeathed by races already of remote antiquity when Abraham was born at Urukh, a heritage shared by all the Semitic nations, Assyrians and Arabians as well as Hebrews. They included the acknowledgment of the Angelic Orders; of celestial chieftains and intelligences belonging to the mystical universe; of the eight Heavens: of minor elemental intelligences, spirits of fire, air, earth, and water, not necessarily good, and needing control. Even the saintly Dominican doctor, Thomas Aquinas, had accepted the Kabbala long before Hohenheim's time. Much indeed of its doctrine had passed into the theology of other nations, western as well as eastern, some of it spontaneously, some through contact and conquest.

Magic is practically "the traditional science

of the secrets of nature" bequeathed by the *Magi*, who were the priests and theologians of oriental civilisations:

> The sacred knowledge, here and there dispersed
> About the world.

CHAPTER XII

TEACHER, MYSTIC, CHRISTIAN

> Man is not man
> While only here and there a star dispels
> The darkness, here and there a towering mind
> O'erlooks its prostrate fellows: when the host
> Is out at once to the despair of night,
> When all mankind alike is perfected,
> Equal in full-blown powers—then, not till then,
> I say, begins man's general infancy.

PARACELSUS was no juggler, no vulgar trickster assuming the garb, ritual, and pose of the superman. He left such practices to the baser natures of his own and later days. To understand him as he was we must divest his memory of many legendary attributes. It was customary after his death to ascribe to him the occult manufacture of gold, the possession of the philosopher's stone, dominion over elemental and evil spirits, the powers of alchemic creation and astrological prediction. He was for centuries after his death claimed as the founder of Rosicrucianism, one of the first traces of which ascription is to be seen in the illustration mentioned in the last chapter as amongst the thirty-two symbolic wood-cuts in Huser's edition of the "Prognostications," which was reproduced in the flying-sheet of 1606, and which

shows his books inscribed with either the letter *R* or with the word *Rosa*.

One by one these legends can be discredited. Oddly enough, the badge of the Rosicrucians was a development of Luther's emblem—an open rose whose centre is a heart from which springs the Latin cross. The rose, heart, and cross are each and all ancient hierograms, pertaining to symbolic religion and recognised as emblems of purgation by suffering and attainment of union with the divine. Luther may have combined them into a symbol of the Christian life.

But not until 1593 did this symbol become the arcane badge of a secret society apparently theosophical and Protestant, but not yet called Rosicrucian. It was in Nüremberg that Simon Studion established, fifty-seven years after Hohenheim's death, the first Rosicrucian Brotherhood and called it the *Militia Crucifera Evangelica*, and it was he who elaborated the mystic symbolism of the Rose-Cross. But the fraternity was not known as Rosicrucian till early in the seventeenth century. A number of treatises were then published purporting to establish a mythical origin for Rosicrucianism, but found to be inventions. The fame of Paracelsus was connected with Studion's Brotherhood because its members were students of nature and accepted his scientific teaching of chemistry and astronomy, elaborating his

views upon evolution into an advanced theory. It was this connection which gave to his philosophical volumes the fame of being the sources of Rosicrucian scholarship. But Paracelsus died more than half a century before the foundation of the *Militia Crucifera Evangelica* and the inventions of Johann Valentin Andreæ, a priest at Tübingen and later Abbot of Adelsberg in Stuttgart, did not begin to appear till 1614. This man compiled his fictitious pamphlets in the hope that they might effect a reformation amongst the clergy. On his deathbed he confessed that they were intended as satirical fables, but their title had gone forth into the German world, and Rosicrucian societies were formed at Nüremberg, Hamburg, Dantzic, and Erfurt. The infection spread to Holland and to Italy, more particularly to Mantua and Venice. Their members wore a special costume at the meetings, black robe and blue ribbon embroidered with a golden wreath and rose, and they used the Buddhist tonsure indicating the oriental influence which had developed the " True Order of the Golden and Rosy Cross."

" All had to bear the cross of suffering before they could become crowned with victory ; all had to crucify their personal and selfish will and die in regard to those things that attract the soul to the sphere of earthly desires and illusions before they could have its spiritual faculties unfolded by the rays of the rising sun."

We cannot but recognise Rosicrucianism as a specialised recrudescence of primeval mystical culture, christianised as had been the sacerdotalism and ceremonial of paganism, and containing the same immortal verities which had civilised the East millenniums before Christianity.

The tradition that Paracelsus was a gold-maker lasted for centuries after his death: it was founded on the deathless faculty for chimerical conjecture which distinguishes the human from the animal mind. Paracelsus in speech and writing laughed the "gold-cooks" to scorn. For him chemistry meant the discovery by analysis and combination of medicines for healing. None the less his very secretaries clung to the delusion and hoped some day to catch him in the act and to discover his process. That he was aware of this is certain. To it was due the hypocritical constancy of Oporinus, "this arch-knave that dogs my heels, as a gaunt crow a gasping sheep."

He played with their childish and obstinate superstition, and one practical jest is recorded by the "studious Franz," in a letter published by Michael Neander in 1586, from which we may quote:

"One day he said to me: 'Franz, we have no money,' and gave me a gulden, bidding me go to the apothecary, get a pound's weight of mercury and bring it to him. I did this and brought it to him with the change, for mercury

was not dear at that time. Then he placed four bricks so close together on the hearth that the air below could hardly escape, and shook the mercury into a crucible, which he set upon the bricks, bidding me lay burning coals round about it and heap coals and coal-dust upon them. Then he went into the room with me and after a long time said: 'Our volatile slave may fly away from us, we must see what he is doing.' As we came in, it was already smoking and flying away. He said: 'See, take hold of the mass with the pincers and keep it inside for a little while, it will soon melt.' This happened accordingly. Then he said: 'Take out the pincers and cover the crucible, make up the fire and let it stand.' We went back into the room and forgot what was in the crucible for half an hour, when he said: 'We must now see what God has given us; take off the lid.' This I did, but the fire was quite out and in the crucible all was solid. 'What like is it?' said he. I said: 'It looks yellow like gold.' 'Yes,' he said, 'it will be gold.' I lifted it off, opened the crucible, as it was cold, and took out the lump. It was gold. Then he said: 'Take it and carry it to the goldsmith over the apothecary's and ask him to give me money for it.' This I did; the goldsmith weighed it, it came to an ounce less than a pound, then he went and fetched money in a flat purse made of cardboard which was full of Rhenish guldens and said: 'Take this to your master and say that it is not quite enough, but I will send him the rest when I get it.'

There was a roll about the size of a big hazelnut done up with red sealing-wax, but what was inside I did not dare, being a young man, to ask, but I think that had I asked him, he would have told me, for he always showed me liking."

In this practical jest, apothecary and goldsmith cleverly played their parts.

He says in his " Greater Surgery " :

" It has happened that in chemical research very wonderful medicinal discoveries have been made which serve to prolong life. . . . But following these come the goldmaking tinctures assuming to transmute metals. Thus they have made a tincture which colours metal. And from such has arisen the opinion that a change can be made in metals and that one substance can be transformed into another, so that a rough, coarse, and filthy substance can be transmuted into one that is pure, refined, and sound. Such discoveries I have attained in various kinds, always connected with attempts to change into gold and silver."

We know already what was his attitude towards astrology, a study which fascinated men of his day and even men of the Renascence, as Girolamo Cardano in northern Italy and Melancthon in Germany. Cardano busied himself with horoscopes all his life and believed in them, even when events discredited them, as in the case of his horoscope of King Edward VI.

of England, for whom he predicted recovery and long life. He may have had a wholesome fear of drawing up an ill-omened horoscope for a king, and yet he was no coward but an exceptionally truthful man for an Italian of that date. That Melancthon held astrology to be worthy of serious credence helps us to estimate its attraction for even the most cultivated men of the sixteenth century

There is little doubt that Hohenheim gave it a thorough trial. Probably the mysterious visits to Esslingen fix periods of his investigation, and these may have been renewed at St. Gallen with Schobinger's assistance. It was shortly after these visits that his conclusions found expression in the "Paramirum," where he declares his antipathy to astrological theories and to ascribing character, tendencies, and destinies to the influence of the heavenly bodies. He repudiates all such views and claims God as the giver of all human qualities and of their manifold combinations. In his two treatises upon comets, he expresses views directly opposed to those of the astrological writers of his time and seeks to define in exact terms the study of the heavenly bodies as an effort to know what they really are and how they are placed in relation to the earth, refusing to regard such a study as arrested in the hands of diviners and soothsayers, but instead as a true research beginning to yield fruits in discoveries as trust-

worthy as those made in the other provinces of nature. In fact, he was a keen student of positive astronomy.

Necromancy and sorcery he abhorred with all his might. He did not deny their claims to credence, but ascribed their effects to the invocation and exercise of powers at least evil, at worst infernal, and on both counts to be abjured. Nor did he give these the credit of all the malignant diseases popularly claimed for them. He argued forcibly against demoniacal possession and insisted that such maladies as St. Vitus' dance, St. Veltin's sickness, St. Anthony's fire and others, are not indications of saintly wrath inflicted, as penance, but proceed from some one or other of the natural origins of disease, and that each must be studied from the standpoint of true medical diagnosis. He taught that corrupted imagination had extraordinary power to bring about disease, but denied that the devil could create disease, although he was able to induce in men the evil spiritual and mental conditions which were favourable to disease. A passage from the last book of the "Paramirum," that upon the "Origins of Invisible Diseases," and from its final chapter, may be translated as illustrating his attitude towards sorcery both outside and inside the Church :

"Satan sees to it that we do not use this means without introductory ceremonies. What

are these ceremonies? Hypocritical fasting and praying: as the Pharisee made a show before men, so must a like pharisaic show be made before the devil, with characters, numbers, and times and many abstinences, with blessing and consecrating, with holy water and the like. For the devil sees to it that if a man would receive something from God, he must forget God and practice all these ceremonies for the devil himself, since it is he who will grant the man's request. For just as men live in the world, one opposed to the other and wandering in the misleading of their theological guides, so too do these spirits. The lovers of ceremonies have converted the spirits to words and names, so that they may be garbed in these just as if it were not the spirits upon which men call. It is much as if men should lose the favour of God by denying good words to Peter, although Peter and the spirits are servants and must do what they are bidden do. From which it follows that if Christ should bid Peter set at liberty, he must do it, and if He should bid him bind, he must do it. And when he does it, it holds both in heaven and upon earth. . . . All things must be sought for in God; therefore what He bids His servants do, they obey, whoever they are, whether angel or devil. For the spirits too are bidden to teach and to help and so God gives us what is good through friend and foe. Therefore at His bidding the spirits have revealed knowledge and have unveiled the Light of Nature. They have been bidden to do this to those who have sought earnestly to know.

But there are those who call upon these spirits as if they did these things of their own will, and thus they have been wrested from God's command and according to the hidden teaching have, by the Chaldeans, Persians, and Egyptians, been identified by name and raised to the position of gods. If we ask much from the saints and God's command is not present, they can do nothing for us, for they are only His servants. And yet *their* names too are preserved and men have played with their spirits and set up ceremonies, fasting, praying and the like, just like the Jew Solomon with his mirror, or Moses with his book of consecration: and thus ever more and more, men have multiplied ceremonies in the hope of prevailing by such means. But they receive only worthless weeds and foolishness, for such is the gift of all servants with whom God has nothing to do."

Concerning charms against harm and diseases, to be obtained by witchcraft from the devil, he says:

"Do you really believe that the devil in his own might can make a charm so that no one shall be able to wound or stab me? That is impossible: no one but God can do that. The devil can create nothing, not so much as that an earthen pot cannot be broken, far less a human being. He cannot even extract the smallest tooth, far less heal a sickness. He cannot change a single plant from what it is. He cannot bring two men together, far less

make them friends or foes. The reasons are, first, concerning the charm against wounding or stabbing: He who protected St. Lawrence so that he was not burned upon the grating, who saved St. John from the boiling oil, who brought the three children unhurt out of the fiery furnace, He knows and will help them whom He wills to help. And as happens to men now, so will happen at the last day, when God will judge according to the faith and according to the superstition of men. Who can heal sickness but God alone? A man may call upon the spirits, he may as well call upon the plants. It is God alone who can alter the body: be steadfast to Him. The spirits are powerless unless God decrees or summons. . . . And it is fantastic to suppose that written characters can make either friendship or enmity."

He then reminds us that from the light and power of nature comes protection for the body, and that these can only be serviceable when we have faith in God.

"Therefore we must hold fast to the glory of God and no way depart from our faith in Him, and so make ourselves strong in the faith. Avoid those therefore who call themselves Apostles, and yet continue in sin. And avoid those who take their own spirit for the Holy Spirit, whose desire is to destroy what may not be destroyed. For upon their self-righteous heads are those sects which seize upon a single

article of faith left clear and simple by the Apostles and make it all-important and complex, like the Baptists, the Bohemian Brothers and the Trinitarians."

Surely in the strenuous warnings with which he thus closes the " Opus Paramirum " we hear the voice of neither wizard nor charlatan, but of a devout believer in God, whose glory man's life must either set forth or be wrecked.

A mystic Paracelsus certainly was. From his early acquaintance with neo-platonism he developed his spiritual philosophy. It was union with God, a union whence the spirit of man derived all power to overcome the spirits of evil, to understand mysteries, to discover the hidden arcana of nature, to know good and discern evil, to live within the fortresses of the spirit, to see with illumined eyes through the mists and the dust-storms of sophistically devised and arbitrarily imposed theological and ethical systems to the throne of God, where wisdom, truth, and righteousness abide. He found the hand of God in all nature, in the recesses of the mountains where the metals await His will; in the vault of heaven where " He moves the sun and all the stars " ; in the river sped with His bounty of food and drink for man ; in the green fields and the forests where spring a myriad ministering herbs and fruits ; in the springs that pour His healing gifts into the laps of the valleys. He saw that the earth

was God's handiwork and was precious in His sight.

Professor Strunz, writing of Hohenheim's personality, presents him as charged with the dynamic force of the new age :

" His was a mind of mighty features whose rare maturity converted the stating of scientific problems into warm human terms, and we owe to him the realisation of a cultured human community based upon Christian and humanitarian piety and faith, which things we may well regard as the bases of his teaching concerning both the actual and the spiritual. His restless life never robbed him of that witchery which ever and again flushed the immortal impulses of his soul like golden sunshine: that vision which belongs to the great nature-poet. And yet few men of his time recognised, as he did, the incalculable result to be attained by the empiric-inductive method. In the Natural Philosophy of Comenius, a deep and gifted soul who in many ways reminds us of Paracelsus, there quivers too that sense of the charm and joy of nature-research, which tells men of the becoming and of the passing away, of working and resting, and reveals the precious codex of nature in which we read concerning God and His Life Eternal. Not within himself shall man seek first the interpretation of the unity of all human consciousness, but in nature itself, where God guides, reason illumines, and the senses witness. Is there anything in our discernment which sense did not first appre-

hend? The nearer our reason to the apprehension of sense, the stronger in realisation, the mightier in grasp will our reason be: and the further our reason strays from the kernel-point of sense perception, the greater are its errors and vain fantasies. . . . Paracelsus felt like an artist and thought like a mathematician, just as he combined the laws of nature with the laws of the microcosm, that is of man with his consciousness, his feelings, and his desires. It was this delicate artistic sense which proved to be the daring bridge from the man Paracelsus to the keen-visioned observer of reality, a wondrous viaduct resting upon the traverses of the new humanity, the Renascence. For upon this viaduct moved forward that reconstruction of the universe of which Paracelsus was one of the greatest architects. It was the platform of a spiritual advance, completed later by Giordano Bruno, poet, philosopher, artist, and student of nature. . . . And with this Paracelsus found his religion in closest bond. Nature with all her unfathomable wealth and beauty, with her immortal types and her obedience to law, was for him the gate of medicine, just as love for all who laboured and were heavy laden, who rested within God's great hospital upon earth, meant for him that divine guide who unlocked the treasure-house of nature's arcana. The world of Francis of Assisi and of Henry Seuse expanded about him: again the summer sunlight lay upon the earth, again God within and deep love of nature became one with the intellectual inspiration of

a man in earnest. Not only St. Francis in tender love and holy poverty, that saint who brought about a glorious springtime of Catholicism without violence—no, but that Francis too who sang the Canticle of the Sun, stands again before us. How should such a man as Paracelsus have escaped the touch of mysticism, when even a Luther felt its influence? . . . A feeling for nature like a wave issued from Paracelsus and reached to men of the future like Comenius and Van Helmont. And they too understood the consecration of research and the sweet, pure note of joy in discovering the laws of God. Paracelsus had just that piety which to-day we admire in the classic mystics. He stood against rationalism and all the fanciful religiosities. He saw God in nature just as he saw Him in the microcosm and was amazed at the reflection of the divine light. His conclusions form the ethics of a Christian humanism. The close brotherhood of God's children must spring from a well-ordered humanity, from human knowledge and from consciousness of the unspeakable value of the soul in each of its members. This world with its thousand forms and potentialities is in its unity and in its interdependence the revelation of the laws of God: nature is the true helper and friend of the sick and infirm, whether rich or poor. Nature with her miracles in the field, where the sower entrusts his seed to the dear earth without so much as guessing how what he hopes for will occur: above in the still mountains where the old trees die and the new come in

their place; in the whispering grove and in the hedge, in the lake where the sun plays with the water as with precious pearls; wherever the fierce battle between tares and wheat goes on in the billowy glory—all, all is living nature. Paracelsus has enshrined it in pictures and similes, allegories and parables. The lapse of every year, its coming and its passing, spring-time when the new rhythms sway to and fro, summer when young life reaches the harvest and the husk, and time hastens it to the fruiting, autumn when all is done and all is weary, and life languishes. How often he has likened his pilgrimage to autumn, his life to its full maturity, an abundance for the new world."

I have quoted at length from Dr. Strunz, because amongst the great German Paracelsian scholars he possesses perhaps the keenest insight into the character of Hohenheim, a character in which simplicity is combined with genius, with heroic veracity, with unclouded vision, with a spirit in touch with God.

As a Christian he listened to the teaching of Jesus Christ. Attempts were made by the Protestants of his time to claim him for their party, and are made by the Catholics of to-day to present him as a Catholic. To me it seems that while he abjured the fetters of the old historical ecclesiasticism, he dissented from the new limitations of Protestantism. He stood free from both and looked to Jesus Christ alone for guidance.

"Every fool," he wrote, "praises his own club; he who stands on the Pope stands on a cushion; he who stands on Zwingli stands on emptiness; he who stands on Luther stands on a water-pipe."

Professors Sudhoff and Schubert are of opinion that at first, when he returned from his earlier travels full of the new science and the new medicine which he had to proclaim, he found amongst the reformers a readier acceptance of his views than amongst the Catholics, and that their greater open-mindedness disposed him towards their doctrines and all the more because as a student of the Bible he was aware of the Catholic aberration both ecclesiastical and doctrinal from Christ's teaching concerning the Kingdom of God. These writers fix the period of his leaning towards Protestantism as lasting to about 1531, but it is now known that he was doing evangelistic work in Switzerland for three years later and that this excited an outburst of persecution from the priests. It is apparent, however, that he drew farther and farther aloof from both parties and found that pure religion and undefiled consists in the daily walk with God and in neither Pope, Priest, nor Presbytery. We know that he never formally disconnected himself from the Catholic Church, and that he was buried as a member of its communion. But that he reserved his right of judgment in matters spiritual cannot

be gainsaid. His writings contain many apt criticisms of sacerdotalism in both parties and many misgivings concerning the new tenets of the reformers. After 1531 he seems to have developed far more than previously his theological views, for he was occupied with questions of doctrine, faith, and sacrament from that time forward.

No doubt the dissensions which broke out in the 'thirties between Lutherans and Zwinglians considerably modified his opinion of both, and led him to the conclusion that as such dissensions were hostile to the establishment of God's Kingdom, neither Pope, Luther, nor Zwingli had grasped the quintessence of Christ's teaching. In such dissensions he saw only the impatience of one leader against the doctrine of the other, only the absence of spiritual unity, only the hostility amounting to personal hatred which some trivial variance of expression excited. Indeed he went so far as to call Lutherans and Zwinglians "sects clad in gospel cloaks," and accused them of wresting Christ's words from His meaning and twisting them to the meaning which they desired. In one of his later discourses, "Sermo in Similitudinis," he wrote:

"In fine, whether they be papists, Lutherans, baptists, Zwinglians, they are all of them ready to glory in themselves as alone possessing the Holy Spirit and alone justified in their con-

struction of the Gospel: and each cries, '*I* am right, right is with *me*, *I* speak the word of God, Christ and His words are what *I* tell you: after *me* all of you, it is *I* who bring you the Gospel.' And yet it was just that which was the sin of the Pharisees. . . . It is a sin against the Holy Ghost to say: the Pope, Luther, Zwingli, etc., are the Word of God, or speak to us from Christ, or are they who represent Christ, are His prophets, are His apostles: he who holds and esteems their discourse as the Word of God sins against the Holy Ghost. . . . Thou hearest not what Christ says, but only what they say."

Fierce as those of the Hebrew prophets are his invectives against synods, councils, synagogues, and church assemblies, against the monastic orders, against superstitions, pilgrimages, ceremonials, all the hypocritical occultism of so-called holiness. "God requires from us our heart," he says in his treatise on "Invisible Diseases," "and not ceremonials, for with these faith in Him perishes." "If we seek God we must go forth, for in the Church we find Him not."

He takes firm footing on the life and the teaching of our Lord, for *there* is the only foundation for our creed:

"It is there, in the Eternal Life described by the Evangel and in the Scriptures that we find all we need: no syllable is wanting in

that." "In Christ only is salvation, and as we believe in Him so through Him we are saved. No worship of the saints is needed for that, no idol of our imagination. Faith in God and in His only begotten Son Jesus Christ is enough for us. Our fasts, our masses, our vigils, and the like effect nothing for us. What saves us is the mercy of God who forgives us our sins. Love and faith are one, for love comes through faith and true Christianity is revealed in love and in the works of love."

Much of this lucid reasoning is to be found in the theological and religious treatises discovered in 1899 and authenticated by Dr. Sudhoff. More particularly in his treatise on the Epistle of St. James does Paracelsus insist on the practical works of Christianity, for "faith without works is dead." He contends that the Lutherans have accentuated the importance of faith to the detriment of that of love.

What Hohenheim wanted was reformation of the human and acceptance of the divine conception of religion. He desired neither the domination of a human sacerdotal authority nor the domination of the Bible as interpreted textually by limited and varying human intelligence, but the domination of God revealed by the Holy Spirit in the person, teaching, and sacrifice of Jesus Christ. The Kingdom of God, which involved the brotherhood of men,

was the pearl of great price, which Christ had shown to the world and had bidden men sell all that they had to secure. He believed that perfection in the spiritual life was God's design for all men, not for a few hermits, nor for a few monks and nuns, who had no warrant from God to assume the exclusive externalities of a holiness which but few of them attained. God had created men for His world, and in the world He claimed their faith and love both for Himself and for their fellows. If God were in very deed accepted as King of His own world, there would be an end of hypocrisy in the rays of righteousness. But the Kingdom of God contains in closest relationship with our life of faith and love a multitude of mysteries which the searching soul may discover one by one. They are the mysteries of God's providence which he who seeks shall find: the mysteries of union with God, the secret tabernacle at whose gate to him who knocks it shall be opened. And the men who seek and knock are the prophets and the healers of His Kingdom, for to them are delivered its keys, the keys which unlock the treasuries of earth and heaven. And these are the shepherds, the guides, the apostles of the world.

"Medicine is founded upon nature, nature herself is medicine, and in her only shall men seek it. And nature is the teacher of the physician, for she is older than he and she is

within men just as she is outside of men. So he is blessed who reads the books which God Himself has written and walks in the ways which He has made. Such men are true, perfect, and faithful members of their calling, for they walk in the full daylight of knowledge and not in the dark abyss of error. . . . For the mysteries of God in nature are great: He works where He will, as He will and when He will. Therefore must we seek, knock, and ask. And the question arises, what sort of man shall he be who seeks, knocks, and asks? How genuine must be such a seeker's sincerity, faith, purity, chastity, truth, and mercifulness. . . . Let no doctor say this sickness is incurable. He denies God our Creator; he denies nature with her abundance of hidden powers; he depreciates the great arcana of nature and the mysteries of creation. It is just in the worst sicknesses that God is praised, not in the cure of trivial indispositions. There is no disease so great that He has not provided its cure."

In touching upon the occultism ascribed to Paracelsus it is necessary to avoid many pitfalls into which the student of his doctrines may stumble by accepting too readily those mystical traditions which in the seventeenth and eighteenth centuries gathered round his memory. His name became a credential for the books of necromancers and hermetists, who appealed in those days of superstitious belief in wizardry and witchcraft to the terror which their squalid

records inspired. He was accused of their own dark rites and malignant practices and his name was blackened by their own infamy. We may unhesitatingly refuse to accept their usurpation of his authority. All that was base, malignant, and diabolical he rejected in no obscure terms. His practice of telepathic and hypnotic powers, his exercise of healing magnetism, were sufficient to invest his name with magical reputation quite apart from any genuine evidence. But there was a residue of half-questioning faith in a number of unseen forces not all arcane and medicinal. There survived in him an admission of elemental beings, spirits of fire, which he called *acthnici*; of air, *nenufareni*; of water, *melosinæ*; and of earth, *pigmaci*. Besides these, imps, gnomes, and hobgoblins had a place in his inheritance from the teutonic realms of faerie. Dryads he knew as *durdales*, familiar spirits as *flagæ*. He believed in the astral body of man and called it *eventrum*; in the astral bodies of plants or *leffas*; in levitation, or *mangonaria*; in clairvoyance, or *nectromantia*; in wraiths, omens, and phantasms. It is, however, very possible that the book ascribed to him, on these uncanny relics of paganism, published in 1566 by Marcus Ambrosius Nissensis and dedicated to Constantine Farber at Dantzic, under the title of "Ex Libro de Nymphis, Sylvanis, Pygmæs, Salamandris et Gigantibus," etc., may not have

been his at all; it is given as an abstract of his writings on the subject, is somewhat arbitrarily arranged, and is prefaced by a dedication which is not only full of errors, but suggests as well a very vague acquaintance with Hohenheim's books.

Much more interesting was his work in amulets, because it indicates his apprehension of the mighty force of electricity. He combined metals to form healing amulets, one of the most effective of which he called the *Electrum Magicum*. It was compounded of seven metals and was used for rings and mirrors. His amulets took the place of gnostic gems and of talismans ascribed to planetary influence and engraved with celestial signs and cabalistic characters. One might almost gather that he used the mediæval craving for magical healing and diverted it to the employment of genuine and efficacious means, disguised as magical.

Precious stones he also accounted valuable for healing. The charms in which these were set were called *Gamathei*. Each had its own virtue. One of his favourite stones was what is called bezoar, which is not a product of either mountain or mine but is formed in the stomach of herbivorous animals, generally semi-wild, by concentric or else rayed accretions of phosphates of lime, ammonia, or magnesia round some small

object which has proved indigestible and cannot be ejected.

His views on precious stones were adopted by the Rosicrucians, who elaborated physical and spiritual interpretations of the occult powers of diamond, sapphire, amethyst, and opal.

CHAPTER XIII

LAST YEARS

> As yet men cannot do without contempt;
> 'Tis for their good, and therefore fit awhile
> That they reject the weak and scorn the false
> Rather than praise the strong and true in me.

The publication of Hohenheim's "Greater Surgery" restored to him the fame depreciated by academic and sacerdotal cabals. About ten years had elapsed since these cabals began, and the children of that time were now men with minds more open and desire for new knowledge more eager than when he lectured in Basel. Two editions of his book appeared in rapid succession, and these detained him in Augsburg till early in 1537. After their issue and that of several editions of his "Prognostications," Paracelsus left for Eferdingen, on the Danube near Linz, to visit Dr. Johann von Brandt, a famous cleric and jurist, whose friendship he valued. During this visit he was busily engaged with the third part of his "Greater Surgery," but was interrupted by a summons in spring to go to Kromau, where Johann von der Leipnik, Chief Hereditary Marshal of Bo-

hemia, required his professional care. Success had supplied him with money, and he could equip himself suitably for this journey with horse, saddle and riding gear, coat, mantle, hat, boots and spurs.

The Marshal was very ill and required a lengthy attendance, and Hohenheim remained at Kromau long enough to finish the third volume of the "Greater Surgery," which he dedicated in the first instance to Dr. Johann von Brandt; to write the first book of his "Philosophiæ Sagax," to add further parts and begin a fourth, and to compose the German edition of his famous "Seven Defences," before leaving. Probably he spent the larger part of the summer of 1537 at Kromau. The symptoms and phases of the Marshal's illness exacted much time and attention. At first Paracelsus was horrified by the condition to which his ignorant medical attendants had reduced him. His body was wasted and emaciated, and Hohenheim almost despaired of its restoration to even a measure of health. The physician who had sent him an account of the case had so misrepresented it that Paracelsus told him he would not have come had he known the truth, for the chance of recovery was very doubtful. It was the result of an irregular life aggravated by medical maltreatment. He took it in hand, however, but as he could not remain indefinitely, he wrote out

his diagnosis in detail, including symptoms of four internal and several external maladies, with their causes and probable effects. To this he added a careful account of what means must be taken not only to mitigate their immediate violence, but to restore him and preserve him from future attacks.

He utilised most of the observations made during his attendance in the third part of his "Greater Surgery." As his circumstances now permitted him to employ an amanuensis, the summer months of 1537 were notable for greater literary activity. He dictated all the books already mentioned and probably the "Labyrinthus Medicorum Errantium." Having done what he could for the Hereditary Marshal, he asked his permission to leave for Vienna, where he hoped to find a publisher for his "Defensiones" and for the "Labyrinthus." These two manuscripts he took with him, leaving behind him a whole boxful of others, some of which he had brought from Augsburg and Eferdingen. He journeyed to Vienna on horseback by the valley of the March to Pressburg, where he rested. A note in the City Chamberlain's account-book fixes a date of his stay if not of his arrival. On Friday before Michaelmas, he was entertained at a banquet of honour by the City Recorder, Blasius Beham, and this took place at the end of September, 1537. The Archivarius Johann Batka entered the

items of this banquet : fish, pastry, roast, wine, rolls, groats, milk, eggs, vegetables, parsley, butter, fruit and cheese. Even the cook's wage is recorded, 24 pfennigs. His fame was in men's mouths and he was received with honour.

But in Vienna the doctors exhibited a pitiful jealousy, or it may be a pitiful cowardice, for they avoided him. Probably his " Greater Surgery " confounded their professional practices, and as it was steadily acquiring a European renown, their ignorance took refuge in flight from his presence. Some of the younger men sought him and he was hospitably received by the citizens, amongst whom he effected some well-paid cures and spent the fees handsomely in entertainments to his friends. King Ferdinand, to whom he had dedicated the " Greater Surgery," sent for him twice and wished him to meet his own physicians, but Paracelsus explained to the King that it would be better to leave them alone, seeing they did not desire his knowledge and he did not desire theirs.

In Vienna no one would accept his manuscripts for publication. The title of one of them and the contents of both alarmed the publishers, who would have found themselves at odds with the whole medical profession had they issued his invectives. None the less he enjoyed his lengthened stay in the imperial capital.

The "Labyrinth of Lost Physicians" was not published till 1553, twelve years after Hohenheim's death, when it appeared at Nüremberg in a very imperfect condition, bound up with Latin lines in praise of medicine and rather described than given as he wrote it. What gives this version interest is a fine wood-cut of Paracelsus described by Dr. Sudhoff as follows:

"The formidable countenance is turned slightly towards the left shoulder; the head, almost quite bald, shows the finely moulded brow and the suture; over the ears there are scanty locks of curling hair. His simple dress shows the shirt frill; on the right side is a cord from which hangs a curved tassel; his right hand rests upon the cross-bar, his left upon the knob of his sword-handle. The background is an arched window overgrown with moss, in the curve of which the date 1552 is engraved; while above on a shield are the words *Alterius Nonsit qui suus esse Potest.* It is doubtless drawn from Augustin Hirschvogel's original wood-cut of 1540."

Huser's editions include the "Labyrinth," and in 1599 there was a new edition of the Nüremberg version.

Towards the end of 1537, Paracelsus journeyed down to Villach in Carinthia and stayed about nine months in the little town and its neighbourhood, which he had last visited on his way from Venice to Wirtemberg eleven years earlier.

It is just possible that he did not know his father was dead until he received the news at Vienna, and it may even be that the restoration of his fame and the success of his "Greater Surgery" gave him an impulse to visit his father, and that he first heard of his death when he arrived at Villach. In either case the magistrates must have been relieved to fulfil their obligations in the matter of his father's will. Whatever were the circumstances attending his homecoming, it must have been sad for him. The property bequeathed to him was handed over, and as the business formalities incurred delay, he accepted a temporary post under the Fugger administration as metallurgist. The managers were on the outlook for gold in addition to the lead and silver for which the Lavanthal was already celebrated. Paracelsus made a careful study of the mineral resources of Carinthia and particularly of the brooks and rivers with their spoil of metals from the mountains. He found good reason to believe in the presence of gold, "fine solid gold, good and pure which had been found by miners in the past and was to be found in the present." His researches resulted in a book, which he wrote during August, 1538, and dedicated to the States of the Archduchy of Carinthia, and in which he makes mention of the numberless medicines to be found amongst its waters, minerals, and plants, for the cure

especially of gouty diseases. He sent this "Chronicle of Carinthia" along with three other writings to the States, requesting them to procure their publication. One of the others was the treatise finished at Kromau, on diseases produced by acidity, such as gout, stone, gravel, etc., which he called "The Tartaric Diseases"; another was the "Labyrinth of Lost Physicians"; and the third his famous "Defensiones" "against the calumnies of his ill-wishers."

He was staying at St. Veit, some little distance from Villach, when this took place, and the date of his dedication of the "Chronicle of Carinthia" to the States was August 19, 1538. A fortnight later he received a letter of thanks "from those of their members assembled at Klagenfurt, to the noble and famous Aureolus Theophrastus von Hohenheim, Doctor of both medicines, our very good friend and dear Master," in which he was assured that the Archduchy itself would see to the early printing and publication of his books. But unfortunately the States contented themselves with this promise. It was not till 1563, twenty-two years after Hohenheim's death, that the treatise on "Tartaric Diseases" was published at Königsberg by Johann Daubmann and at Basel by Adam von Bodenstein, while the first unsatisfactory edition of the "Labyrinth" was, as we have seen, printed at Nüremberg in 1553. A better edition of the "Tartaric Diseases"

ALTERIVS NONSIT QVI SVVS ESSE POTEST
EFIGIES AVREOLI THEOPHRASTI AB HOHEN:
HEIM SVE ÆTATIS 47
OMNE DONVM PERFECTVM A DEO
IMPERFECTVM A DIABOLO
1 5A4 40

PARACELSUS.

After an engraving by Hirschvogel from a portrait taken at Laibach or Vienna, when he was forty-seven years old.

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appeared at Cologne, published by the successors of Arnold Byrckmann, a quarter of a century after the promise given to their author. In the same year, 1564, three books together, "The Chronicle of Carinthia" with its full dedication to the nobles of the Archduchy, "The Labyrinth of Lost Physicians," and the "Tartaric Diseases," were issued at Cologne by the same publishers.

Paracelsus was at Laibach in Carniola towards the end of 1538, and met there Augustin Hirschvogel or Hirsvogel, who made a portrait of him and reproduced it as an engraving. This portrait was the original from which nearly all the later wood-cuts and engravings of Paracelsus were taken. One of these has already been noticed. It has been surmised that Hirschvogel wanted it for reproduction in a "flying-sheet." And it was certainly so appropriated, but as in itself it was a fine and sympathetic likeness, it became one of the most representative and characteristic of his portraits and was copied with or without additions and alterations for more than a century. Hirschvogel himself readapted it in 1540, and of this form Dr. Aberle gives the following details:

"Hirschvogel's engraving differs from the copies in the presence of the pedestal of a pillar which rises behind Hohenheim's right arm, its cornice on a level with his eyes. Behind the pillar a narrow wall rests against the pedes-

tal. In touch with the upper part of the pillar and reaching along the breadth of the engraving is a transverse tablet bearing in decorative, double-lined lettering the inscription :

ALTERIUS NON SIT QUI SUUS ESSE POTEST.

Beneath the portrait is a second tablet, of greater depth, on the upper edge of which Hohenheim's left arm rests, and on which we read the faulty title and the second of his favourite mottoes :

EFFIGIES AUREOLI THEOPHRASTI AB HOHENHEIM,
SUE ÆTATIS 47.
OMNE DONUM PERFECTUM AB DEO
IMPERFECTUM A DIABOLO.
15Æ40.

As we know, a very coarse and ungainly wood-cut adapted from this was used by Huser as frontispiece to each volume of his edition of Hohenheim's works. The features are striking and the contour of chin and cheek is delicate and refined. The mouth is small, firm, and closely shut. The brow rises in a majestic curve. The head is bald but for some curling locks at the sides. In the large and deep-set eyes dwells a settled melancholy. He wears a plain coat over a gathered shirt finished at the neck by a small ruffle of lace. His right hand grasps the knob, his left the cross-handle of his sword, about which so many legends were woven, as that within its handle he kept a fiend in bondage to do his bidding, or hid

there his treasured labdanum, or that the sword leapt to do his bidding.

> Ah, trusty Azoth, leapest
> Beneath they master's grasp for the last time.

Whilst resident at St. Veit, Paracelsus practised medicine with great success. He was sent to prescribe for many invalids whom the doctors had brought to their last gasp and then given up. His treatment so discredited their ignorance and recklessness that the old professional jealousy broke out around him. One of his patients was the King of Poland's physician, Albert Basa, who travelled to St. Veit to consult him. Another whom the doctors had abandoned sent for him. He prescribed and invited him to dinner for the next day. The medicine worked wonders and the invalid dined cheerfully with his doctor twenty-four hours later. So fiercely raged the spite of his professional foes, whom he had pilloried in his "Chronicle of Carinthia," that on one occasion when he went to church at Villach they assembled from all parts of the country, from Styria and Carniola as well as Carinthia, and filled the courtyard of the church for the purpose of insulting and hustling him as he passed in and out. It was a strange scene in the Tabor, as such a court was called, for every church in these countries had been fortified to shelter women and children inside, while old men and boys

manned the Tabor against their Turkish enemies. On the one side barbaric cowardice, on the other the tranquillity of old acquaintance with the malignity which underlies stupidity.

He wandered for two years longer. We know very little of where he went and of what he did, but realise that he was visiting patients and writing his last books. He was in Augsburg and Munich, probably in 1539, then again in Villach, then at Grätz in Austrian Silesia, afterwards at Breslau, and for some time in Vienna, where Hirschvogel revised his portrait. He did not make his way to Salzburg till after this second and prolonged visit to Vienna.

It was in 1541 when he started on horseback for Salzburg, *viâ* Ischl, but he took months on the journey, halting where he listed and probably no longer able for lengthened stages. One of his resting places was Schober, now called Strobl, on the northern shore of the beautiful Fuschlsee. Here he stayed in April, 1541, with a friend, and hence he wrote to Jakob Töllinger, who seems to have been a very special friend, sympathetic both in character and in faith. He sent him medical advice and two special recipes and a letter which ended with the very unusual message: "Give my best greetings to your wife and daughter and may God's grace be with us all." These ladies were rarely favoured, for Paracelsus resolutely avoided women.

It must have been May before he reached Salzburg, his last travelling stage. The theory that he was appointed special physician to the Prince-Archbishop, Ernst, Duke of Bavaria and Count Palatine, has been abandoned, although there is reason to believe that he received honourable welcome from the Prince and his court.

What we know about the months before Hohenheim's death amounts to very little. On August 5 he wrote a letter to Franz Boner in Cracow. This Polish gentleman had been advised to consult him, probably by Dr. Albert Basa. He sent a special messenger to Salzburg to explain his malady; to the house at the corner of the Plätzl, on the right bank of the river Salzach. The man was instructed to wait for the great physician's diagnosis and advice. Paracelsus gave both, but indicated that the disease was of too long standing for cure. Several letters passed between them, but he warned the patient that in spite of the remedies suggested it was not possible for him to throw off the disease. He blamed Boner's doctors for their foolish diagnosis.

He was himself suffering from an insidious disease, one not altogether resulting from his restless life of pilgrimage and strenuous work. He had, as we know, compounded his medicines for many years. Herbs and minerals contributed their quintessences to his tinctures,

amongst them antimony, mercury, opium, nightshade, monkshood, and other poisons. He worked with these dangerous substances and it is conjectured that a slow poisoning process had long been at work, due to the fumes of their decoction and distillation. It is certain that his health had undergone a great deterioration. His cheeks were pale and hollow, his lips pinched and compressed, in his eyes was the sadness of unintermitted suffering. Hirschvogel's engraving of 1540 shows every symptom. He had never taken rest, not even the nightly rest which a day's labour or travelling demands. "Rest is better than restlessness," he had once written, "but restlessness is more profitable than rest." It was the more profitable that he sought, knowledge, truth, and wisdom, not gold, nor rank, nor comfort. He had sought them all his life, from the days when he ran beside his father over the meadows and by the river-banks at the Sihl-bridge. Now his travelling days were ended.

Many legends have been invented about his death: one that the doctors of Salzburg had hired a ruffian to follow him in the dark and to bludgeon him from behind, or to fling him down the rocks; another that they had given him treacherous draughts of poisoned wine, or sifted powdered glass into his beer. But thanks to Dr. Aberle's testimony we may dismiss these ugly surmises. What is certain is

that day by day the subtle disease progressed and that he braced himself to meet the invincible master whom it heralded. For some weeks he studied, paid professional visits, or gave medical advice in his own house. He had furnished his workroom with a great fireplace on a flat stone hearth just opposite the door, with shelves and tables and all the requisites of a laboratory, bellows, tongs, pincers, crucibles, vases, retorts, and alembics, with herbs and minerals, and had installed himself ready for consultations, for chemical experiments, for setting down their results. He was engaged, too, in writing his meditations upon the spiritual life. One fragment of these was that "Concerning the Holy Trinity, written at Salzburg in expectation of the Eve of our Dear Lady's Nativity," and unfinished. It was published by Toxites in 1570. There were also a number of passages selected from the Bible and written out on loose sheets.

He was roused from these peaceful occupations by the rapid processes of culminating disease. Death was stealing in to take away his life. He had foreseen the secrecy of death for others and surely for himself. The fitting of his little home, the turning to rest after restlessness, the haste to record his thoughts on the mysteries of our faith, all point to foreboding of days which God had numbered and to a great longing to make the most of them.

"By night," he had once written, "thieves steal when they cannot be seen, and they are the cleverest thieves who steal and are not seen. So creeps in death when medicine is at its darkest, and steals away the life of man, his greatest treasure."

Now, he who had laboured in medicine as in a revelation of God's love, and had sought to dispel its darkness with "God's Lamp," was dying. The hidden ways of God were at work and his life was being drawn from him as the sun is drawn below the western horizon. He recognised the hand that drew and turned to it tranquil and aware. There was last work to be done. He had possessions, books, raiment, medicines. It was incumbent on him to see to their just distribution and it was impossible to make satisfactory legal provisions in his laboratory at the Plätzl. He engaged a room at the White Horse Inn in the Kaygasse, large enough to serve as both sick-room and business-room. He was removed to it before St. Matthew's Day, September 21, when the public notary, Hans Kalbsohr, and six invited witnesses assembled to hear and put into writing his last wishes. Another man was present, his servant Clauss Frachmaier.

The six invited witnesses were Melchior Späch, judge at Hallein, Andree Setznagel, Hans Mülberger, Ruprecht Strobl, Sebastian Gross, all of Salzburg, and Steffan Waginger of Reichenthal.

Paracelsus was in bed but in a sitting posture. The first article of his will after accurate dating and designation is as follows :

" The most learned and honoured Master Theophrastus von Hohenheim, Doctor of Art and Medicine, weak in body and sitting in a camp-bed, but clear in mind and of upright heart . . . commits his life, death, and soul to the care and protection of Almighty God, in steadfast hope that the Eternal Merciful God will not allow the bitter sufferings, martyrdom, and death of His only begotten Son, our Saviour Jesus Christ, to be fruitless and of no avail for him, a miserable man."

He then gives directions about his burial and makes special choice of St. Sebastian's Church beyond the bridge, to which his body is to be carried and where the first, seventh, and thirtieth Psalms are to be sung around it, and between the singing of each psalm a penny is to be given to every poor man who is in front of the church. The choice of psalms was characteristic—his confession of faith that his life should not perish, but should inherit immortality :

" He shall be like a tree planted by the water-side : that will bring forth his fruit in due season. His leaf also shall not wither : and look, whatsoever he doeth, it shall prosper."

" My help cometh of God : who preserveth

them that are true of heart. . . . I will give thanks unto the Lord, according to his righteousness: and I will praise the Name of the Lord most High."

"I will magnify thee, O Lord, for thou hast set me up: and not made my foes to triumph over me. . . . Heaviness may endure for a night, but joy cometh in the morning. . . . Lord, be thou my helper. Thou hast turned my heaviness into joy. . . . O my God, I will give thanks unto thee for ever."

After these directions come the legacies. To Master Andree Wendl, a citizen and doctor of Salzburg, he left all his medical books, implements, and medicines to be used by him while he lived. All his other goods and possessions, with the exception of some small money bequests, he left "to his heirs, the poor, miserable, needy people, those who have neither money nor provision, without favour or disfavour: poverty and want are the only qualifications": his debts were to be paid first. He named his executors, who were Masters Georg Teyssenperger and Michael Setznagel, to each of whom he left twelve guldens in coin and to each of the witnesses he left twelve guldens. After due legal phraseology for confirming the will, the witnesses, including his servant Clauss, set their names to the document and Master Hans Kalbsohr wound up appropriately with his declaration and signature.

This will tells us that his property was in various places, as two boxes full of books and manuscripts at Augsburg, one at Kromau, and other personal belongings at Leoben and various places in Carinthia, probably at Villach and St. Veit.

He lived only three days after this his last labour was accomplished. Probably he died in the Gasthaus zum Weissen Ross. It is certain that he was never in the Hospital of St. Sebastian. He had no fear of death. Death was his "day's work ended and God's harvest-time. Man's power over us ends at death, and only God deals with us then, and God is love."

If I stoop
Into a dark tremendous sea of cloud,
It is but for a time; I press God's lamp
Close to my breast; its splendour soon or late
Will pierce the gloom; I shall emerge one day.

The date of his death was September 24, 1541. It was St. Rupert's festival, a very popular one in Salzburg, which fell on a Saturday in that year. A decree prevailed already as a custom, which was shortly afterwards made peremptory, that not more than twenty-four hours might elapse between death and burial. Hohenheim's body was borne to St. Sebastian's church at once and interred during the afternoon of the 24th, in its churchyard, in the middle of which his grave was dug. The town was

crowded with country people and visitors. The Prince Archbishop ordained that the funeral of the great physician and scientist should be celebrated with all solemnity. Paracelsus had chosen to be laid in the burial-place of the poor, and doubtless many of the poor were there to bid their friend farewell and to receive what he had bequeathed to them. The Prince's mandate would suffice to secure honourable observance to his obsequies, but we should like to know that the lauds he chose were sung around him in the church. His apostolic independence was not known at Salzburg, for his treatises were not printed till long after his death, and he was held for orthodox and buried as he desired in ground consecrated to the poor.

The books with which he was mainly occupied before his death belonged to scriptural study; they were a small Bible, a New Testament, "Concordia Bibliorum," and Jerome's "Interpretationes super Evangelia." Some religious meditations, interrupted, and seven medical treatises composed his last writings. His wardrobe was found to be very full. After the publication of his "Greater Surgery," he must have allowed himself ampler expenditure, more variety of clothes, coats of velvet and damask, mantles, riding-gear. His famous sword is not mentioned in the inventory and we do not know to whom it was bequeathed.

Fifty years later his grave was opened, his bones were taken out and put in a new resting-place against the wall of St. Sebastian's Church. The middle of the churchyard was wanted as a site for the Gabriel Chapel. Hohenheim's executor, Michael Setznagel, had placed a slab of red marble on the grave with a memorial inscription. This tablet was transferred. Its inscription is in Latin, which roughly translated runs :

HERE LIES BURIED
PHILIP THEOPHRASTUS
THE FAMOUS DOCTOR OF MEDICINE
WHO CURED WOUNDS, LEPROSY, GOUT, DROPSY
AND OTHER INCURABLE MALADIES OF THE BODY, WITH
WONDERFUL KNOWLEDGE AND GAVE HIS GOODS TO BE
DIVIDED AND DISTRIBUTED TO THE POOR.
IN THE YEAR 1541 ON THE 24TH DAY OF SEPTEMBER
HE EXCHANGED LIFE FOR DEATH.

Beneath this inscription is chiselled the coat of arms of the Bombasts von Hohenheim and below it are the words : " to the living Peace, to the sepulchred Eternal Rest."

But to Paracelsus, sepulchred again and again, even death brought no rest, for many a time his bones were removed. The second time was in 1752, more than two centuries after their first interment, when Archbishop Andreas von Dietrichstein erected a marble pyramid on a pedestal of marble, into which the old red tablet was inserted, and placed it in the church porch. On the pinnacle rests an urn, but his

bones were put in a niche of the obelisk and shut in by a little door of sheet-iron, on which it was desired to paint a portrait of Paracelsus, but by some blunder his father's portrait was substituted, a blunder only discovered in 1869 by Professor Seligmann.

To this day the poor pray there. Hohenheim's memory has "blossomed in the dust" to sainthood, for the poor have canonised him. When cholera threatened Salzburg in 1830, the people made a pilgrimage to his monument and prayed him to avert it from their homes. The dreaded scourge passed away from them and raged in Germany and the rest of Austria.

Earlier in that century Hohenheim's bones had again been disturbed, this time by Dr. Thomas von Sömmering, who got permission to examine the skull. He discovered the wound at its back on which the myth of his violent assassination was founded. It was said that he was flung down from a height amongst the rocks, and that his neck was broken and his skull shattered. Fifty years later, Dr. Aberle controverted it by successive examinations of the bones in 1878, 1881, 1884, and 1886, the results of which he has detailed in his valuable book "Grabdenkmal Schädel und Abbildungen des Theophrastus Paracelsus" (Salzburg, 1891).

He points out that had Paracelsus died of a broken neck, he could not possibly have dictated

his will, as he certainly did in the presence of seven witnesses. Clear indications of rickets were discovered as one result of these examinations, and to its action Dr. Aberle ascribes the curving and thickening of his skull and its consequent deterioration in the grave.

APPENDIX A

Theologorum Patrono Eximio domino Erasmo Roterodamo vndicunque doctissimo suo optimo.

Que mihi sagax musa et Alstoos tribuit medica, candide apud me clamant Similium Iudiciorum manifestus sum Auctor.

Regio epatis pharmacijs non indiget, nec alie due species indigent Laxatiuis, Medicamen est Magistrale Archanum potius ex re confortatiua, specifica et melleis abstersiuis id est consolidatiuis, In defectum epatis essentia est, et que de pinguedine renum medicamina regalia sunt perite laudis. Scio corpusculum Mesuaijcas tuum non posse sufferre colloquintidas, nec Aliquot [aliquod] turbidatum seu minimum de pharmaco Scio me Aptiorem et in Arte mea peritiorem, et scio que corpusculo tuo valeant in vitam longam, quietam et sanam, non indiges vac[u]ationibus.

Tertius morbus est vt apertius Loquar, que materia seu vlcerata putrefactio seu natum flegma vel Accidentale colligatum, vel si fex vrinae, vel tartarum vasis vel Mucillago de reliquijs e spermate, vel si humor nutriens viscosus vel bithuminosa pinguedo resoluta vel quicquid huiusmodi sit, quando de potentia salis (in quo coagulandi vis est) coagulabitur quemadmodum in silice, in berillo potius, similis est hec generatio, que non in te nata perspexi, sed quicquid Iudicaui de minera frusticulata Marmorea existente in renibus ipsis iudicium feci sub nomine rerum coagulatarum.

Si optime Erasme Mea praxis specifica tue Excellentie placuerit Curo ego vt habeas et Medicum et Medicinam.

Vale

THEOPHRASTUS.

APPENDIX B

Rei medicae peritissimo Doctori Theophrasto Eremitae, Erasmus Roterodamus S[alutem].

Non est absurdum, medico, per quem Deus nobis suppeditat salutem corporis, animae perpetuam optare salutem. Demiror, unde me tam penitus noris, semel dum taxat visum. Aenigmata tua non ex arte medica, quam nunquam didici, sed ex misero sensu verissima esse agnosco. In regione hepatis iam olim sensi dolores, nec divinare potui, quis esset mali fons. Renum pinguedines ante complures annos in lotio conspexi. Tertium quid sit, non satis intelligo, tamen videtur esse probabile mihi, id molestare ut dixi. Hisce diebus aliquot nec medicari vacat, nec aegrotare, nec mori, tot studiorum laboribus obruor. Si quid tamen est, quod citra solutionem corporis mihi possit lenire malum, rogo ut communices. Quod si distraheris, paucissimis verbis ea, quae plusquam laconice notasti, fusius explices, aliaque praescribas remedia, quae dum vacabit queam sumere. Non possum polliceri praemium arti tuae studioque par, certe gratum animum polliceor. Frobenium ab inferis revocasti, hoc est dimidium mei, si me quoque restitueris, in singulis utrumque restitues. Utinam sit ea fortuna, quae te Basileae remoretur. Haec ex tempore scripta vereor ut possis legere. Bene vale

Erasmus Roterodamus
suapte manu.

APPENDIX C

Manes Galeni adversus Theophrastum, sed potius Cacophrastum.

Audi qui nostrae laedis praeconia famae,
Et tibi sum rhetor, sum modo mentis inops,
Et dicor nullas tenuisse Machaonis artes,
Si tenui, expertas abstinuisse manus.
Quis feret haec ? viles quod nunquam novimus herbas
Allia nec cepas : novimus helleborum.
Helleborum cuius capiti male gramina sano
Mitto, simul totas imprecor anticyras.
Quid tua sint fateor spagyrica sompnia, Vappa,
Nescio, quid sit ares, quidve sit yliadus,
Quidve sit Essatum et sacrum inviolabile Taphneus,
Et tuus Archaeus, conditor omnigenus.
Tot nec tanta tulit portentosa Africa monstra,
Et mecum rabida prelia voce geris ?
Si iuvat infestis mecum concurrere telis,
Cur Vendelino turpia terga dabas ?
Dispeream si tu Hippocrati portare matellam
Dignus es, aut porcos pascere, Vappa, meos.
Quid te furtivis iactas cornicula pennis ?
Sed tua habet falsas gloria parva moras,
Quid legeres ? stupido deerant aliena palato
Verba et furtivum destituebat opus.
Quid faceres demens, palam intus et in cute notus,
Consilium laqueo nectere colla fuit,
Sed vivamus, ait, nostrum mutemus asylum,
Impostura nocet, sed nova techna subit,

Iamque novas MACRO cur non faciemus Athenas ?
Nondum auditorium rustica turba sapit.
Plura vetant Stygiae me tecum dicere leges,
Decoquat haec interim, lector amice vale !
Ex inferis.

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